

ALUMINUM COMPANY OF AMERICA

ALCOA BUILDING

PITTSBURGH, PENNSYLVANIA 15219

LEGAL DEPARTMENT



1983 February 28

Mr. Andrew C. Praschak
United States Environmental Protection Agency
General Enforcement Branch
Region II
26 Federal Plaza
New York, NY 10278

Re: Supplemental Response to Request for Information
from Alcoa Facility at Massena, New York

Dear Mr. Praschak:

Enclosed is the final set of documents in response to your Request for Information concerning our Massena facility. This set of documents supplements our response of 14 January 1983 and completes our review of the relevant documents. I therefore also enclose the Certification of Answers to Request for Information signed by Dennis M. Falls, Massena Operations Manager, and Philip F. Woodward, Massena Environmental Control Superintendent.

I have numbered the enclosed documents starting with number 49 and ending with number 77. Documents numbered 1 to 48 were sent to you with our 14 January 1983 response. A list of the enclosed documents is attached.

Where necessary, I have updated the summary of relevant information provided in response to each request. Because many of the documents merely support or amplify the information we have already supplied, I have refrained from repeating this information in the summary. The list of documents relevant to each request has also been updated.

Request 1

Response: In December of 1979, it was proposed that a formal record-keeping procedure be developed to account for the disposal of waste oils (Document #60). The necessity of establishing such a procedure suggests a lack of formal record-keeping concerning waste oil disposal prior to this time.

Responsive documents: #(s) 49, 50, 51, 52, 53, 54, 55, 56, 59 and 60.

570117



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Request 3

Response: Information from Massena Operations representatives suggests that the number of capacitors in service in 1982 may not be representative of the 1950 to 1979 time frame. The number of capacitors in use was greatly increased two or three times due to the changes that occurred in plant operations and equipment during the 1970's. It is impossible, however, to determine precisely in our records what is a replacement and what is an addition to the capacitors in service. The 1982 figures, therefore, would actually represent the highest number of capacitors in service during the period 1950 to 1979.

Responsive documents: #(s) 57, 65, 66, 67, 68 and 69.

Requests 4 and 5

Response: We have been unable to precisely determine from our records the source of the information referred to in Requests 4 and 5.

Responsive documents: #(s) 57, 65, 66, 67, 68 and 69.

Request 6

Response: In December of 1978, a formal system of record-keeping was established for PCB material (Document #59) in accordance with the PCB Marking, Storage and Disposal Rules. No formal records of this information apparently were kept prior to this time.

Responsive documents: #(s) 57, 58, 59, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75 and 76.

Request 7

Response: We stated in our 14 January 1983 response that burning of waste oils in the boilers was discontinued after 1972. There is one exception to this rule as waste transformer oil has been burned in the Massena Operation's boilers since 1972. No records were kept of the volume of oil burned or the date of incineration. To the best of our knowledge no waste transformer oil was burned at the Massena Operations during 1978 or 1979.

We have attached gate log sheets that have entries reflecting the presence of an oil reclamation company on site. We have reviewed all of the available gate logs for the Massena Operations, which includes the following dates:

12/16/58 to 12/27/63
10/01/76 to 12/31/79

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Only those relevant log sheets have been reproduced.

Responsive documents: #(s) 50, 53 and 77.

Request 8

Responsive documents: #(s) 59, 53 and 77.

Request 10

Responsive documents: #(s) 53 and 77.

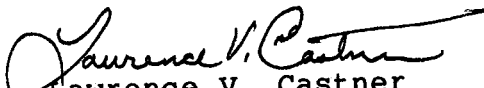
Request 11

Responsive documents: #(s) 53 and 77.

Request 12

Responsive documents #(s) 53, 57, 58, 70, 71, 72, 73, 74, 75
and 76.

Sincerely yours,


Lawrence V. Castner
Attorney

LVC:pd

Attachments

LIST OF DOCUMENTS ENCLOSED

- #49 1968 Letter re: Solid Waste Disposal.
- #50 1977 New York State Hazardous Waste Survey.
- #51 1973 O'Brien and Geer Engineers, Inc. Study, lettered a and b.
- #52 1971 St. Lawrence County Refuse Disposal Study.
- #53 1980 January Massena Environmental Steering Committee Report.
- #54 1972 Industrial Liquid and Solid Waste Survey.
- #55 1978 Correspondence re: Soluble Oil to Dump, lettered a and b.
- #56 1977 Massena Catalog of Classification of Lubricants.
- #57 1979 PCB Records.
- #58 1980 Letter re: PCB Fluids.
- #59 1978 Inter-Office Memo re: PCB Orders.
- #60 1979 Letter re: Disposal of Oils, Oily Wastes and Liquids and Sludge from Caustic Dip.
- #61 1957 Letter re: Used Transformer Oil.
- #62 1960 Memo and supporting documents re: Loading 12 MVA Power Transformer TB-27 for Shipment to Yadkin, S.O. #17912, lettered a and b.
- #63 1981 Letter re: Transformer Oil Storage.
- #64 1975 Letter re: Disposal of Polychlorinated Biphenyls.
- #65 1978 Correspondence re: Proposal to Dispose of Spent Capacitors through Jones Chemical, lettered a, b and c.
- #66 1979 to 1981 Correspondence re: Proposal to Dispose of PCB-contaminated Material through Chemical and Environmental Conservation Systems International, Inc. (CECOS) lettered a, b, c, d, e and f.
- #67 Unsigned undated notes re: Disposal of PCB-contaminated Material, lettered a, b, c and d.
- #68 Purchase order and supporting documents for 01 May 1980 shipment of PCB-contaminated material to CECOS, lettered a, b, c and d.

- #69 Purchase order and supporting documents for 15 October 1980 shipment of PCB-contaminated material to CECOS, lettered a, b, c, d, e and f.
- #70 Miscellaneous shipping order and supporting document for 15 July 1976 shipment of hydraulic fluid to Swope Oil.
- #71 Miscellaneous shipping order and supporting document for 19 May 1977 shipment of hydraulic fluid to Swope Oil.
- #72 Miscellaneous shipping order and supporting document for 20 May 1977 shipment of hydraulic fluid to Swope Oil.
- #73 Miscellaneous shipping order and supporting document for 26 May 1977 shipment of hydraulic fluid to Swope Oil.
- #74 Undated unsigned notes re: Soluble Oil.
- #75 Undated unsigned notes re: Hydraulic Fluid.
- #76 1978 and 1979 correspondence re: Storage of Contaminated Materials, lettered a, b and c.
- #77 Massena Daily Gate and Visitor Register, various dates.

CERTIFICATION OF ANSWERS TO
REQUEST FOR INFORMATION

I certify that the foregoing answers to the EPA Request for Information are true, complete, and accurate to the best of my information and belief and that any documents submitted herewith are true, complete, and authentic to the best of my knowledge and belief.

DENNIS M. FALLS

Dennis M. Falls
SIGNATURE OF PERSON SIGNING

Operations Manager
TITLE

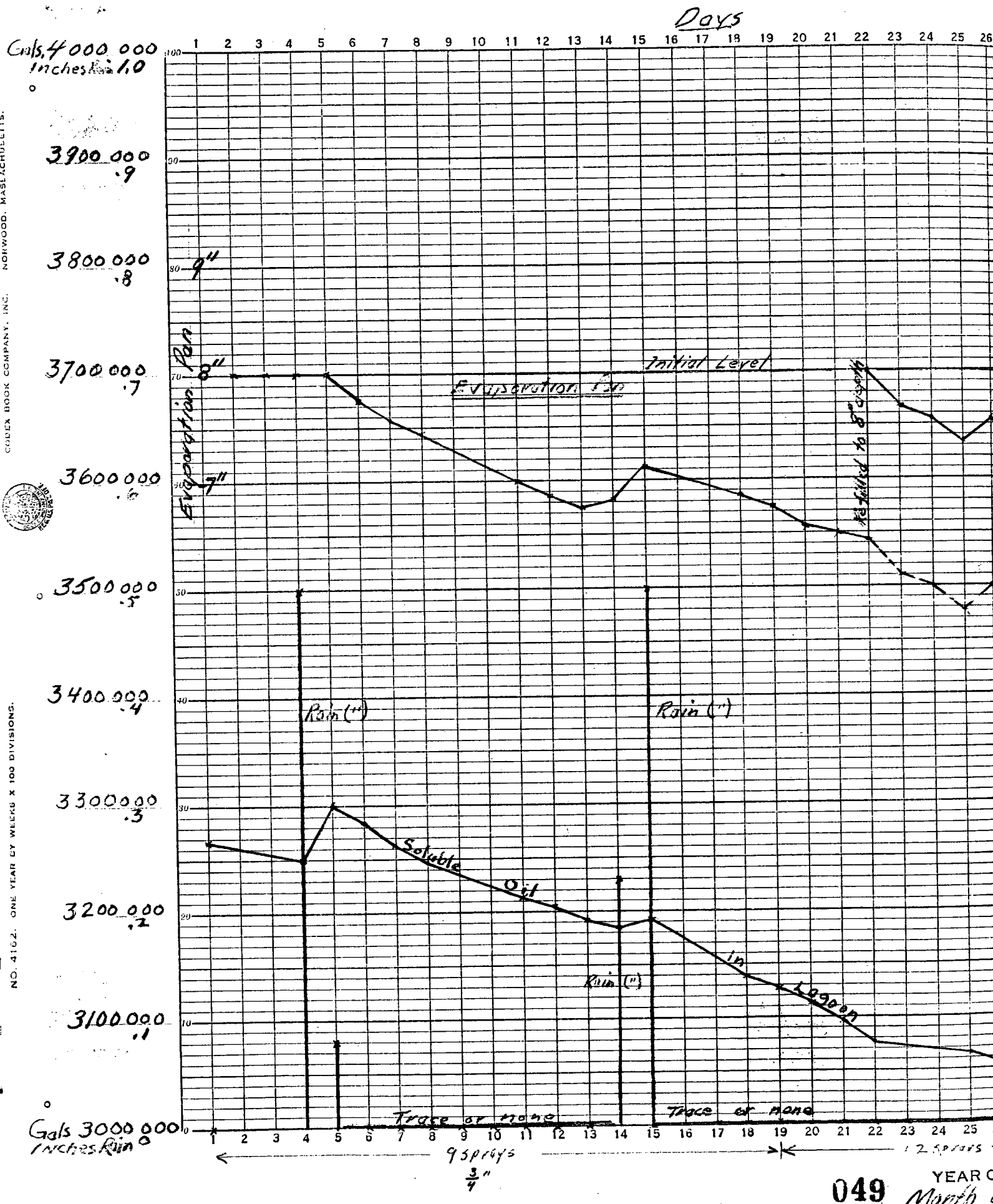
PHILIP F. WOODWARD

Philip F. Woodward
SIGNATURE OF PERSON SIGNING

Environmental Control Superintendent
TITLE

CODING BOOK COMPANY, INC. NORWOOD, MASSACHUSETTS.

NO. 4162. ONE YEAR BY WEEKS X 100 DIVISIONS.



Soluble Oil Lagoon Activity Month of September, 1961 Messana Works

Total Evaporation from Pond 4.63" (includes rain)
Applied to lagoon this results simulate 370,000 gals.
Applying an .85 coefficient water mean 295,000 gals.

Pond size - 27' x 48' x 11" deep Filled to 8" depth

Rain (")

Rain (")

Loss

Loss

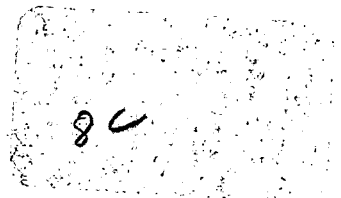
Oil Level

Trailer 5.22 - 5460 gals

START OF OIL
DUMPING

Discharge to Lagoon from
Inventory Cleanup - 195,000 lbs.

OF 19 61
of September



(7)

After the initial 21 months of operation the oil lagoon was found to contain 3,300,000 gals of soluble oil solution. ^① This does not quite reconcile with the theoretical figures which show that for this period an accumulation of oil in the neighborhood of 4,700,000 gals of oil would have been expected. ^② However on the negative side, small quantities of oil were spread on crater pit and access roads and it is known that evaporation lowered the pond considerably. An attempt to ascertain an evaporation rate ^③ was not too successful because of the difficulty of correlating scheduled dumping, rainfall and the variations in the overall weather picture. Windy & sunny days seemed to speed up the evaporation rate considerably in midsummer.

However, as we have to establish some base for starting our calculations, and also assuming that the pond ~~will~~ ^{will} continue as the base for operations, we are assuming a yearly pond dump figure of 2,000,000 gallons. Please bear in mind this is an estimate and may change seasonally or yearly. The dumping schedule is ~~an~~ ^{also an} estimate and subject to the decisions of the mid people.

- ① Section survey - conducted from rampart bank.
- ② 1958 Mid Survey - Mech. eng. dept figures accumulated by Com. & Co.
- ③ 4/24/59 - 11/2/59 - on file in Coast office.

240

100
- 50
50

0050

②

To continue to break the oil solution down as was done in 1960 would cost for 2,000,000 gallons, \$1,150 or .0057¢/gal. This is not the full cost however as the sludge & oil disposal problem would be solved in 1960 - all sludges & oils were put back in the lagoon as soon as the water was separated. Lack of favorable weather curtailed any further experimentation with oil disposal and the cost of this extra operation will have to be estimated and based on an idea which may not work.

Second thinking is that such additional treatment of the floe which was collected at 2 sources^①, namely the floe from the separation tank which contained in the neighborhood of 6000 p.p.m. of oil and the skim from the secondary settling lagoon which contained 2000 p.p.m., would have to be returned in still another third lagoon for further breakdown. This would probably be accomplished by bubbling with acid to release the oil from the water and a further disposal problem of the remaining acid water would have to be instituted & maintained indefinitely. If the lago. we have a 5% solution of soluble oil at the start, we have in the neighborhood of 100000 gals of oil to contend with by the end of the day. Unfortunately for us, (from survey 4000) ~~only~~ about this?

Report on 1868 operations. Soluble Air Project

the water coming over with the oil in the form of foam constitutes the larger volume of the foam, so that we would be compelled to treat a volume at least three times as large as the oil itself contains. No attempt has been made to estimate these final treatment costs but we feel that it would be fully as much as for the first treatment or another \$11500 making a \$23000 total yearly cost. Even if this is the correct estimate, we will still have an expensive, ever accumulating cost, pending on hand to be disposed indefinitely.

Going back to another idea which was entertained first in 1958 & tried on a small scale in the summer of 1959, we have taken another look at the problem of destroying the oil & water completely by injecting it into the boilers. The trial was on a very small scale only, with one $\frac{3}{4}$ gal./minute nozzle, the results of which were satisfactory in that there was no appreciable, visible change in boiler operation. Some calculations have been made by D. M. Hutton in an attempt to ascertain the theoretical fuel cost of such a program and are presented here for your appraisal.

(4)

Theoretical Fuel Cost for Disposing of Soluble oil in Boilers.

2,000,000 gal of 5% Soluble oil/year
 $\times 8 \frac{1}{3} \text{ gal}$

16,667,000 # of 5% Soluble oil/year
.05

833350 # neat Soluble oil

19000 BTU/# of neat oil

15,833,650 BTU available in neat oil

$16,667,000 - 833,350 = 15,833,650 \text{ # water}$

Heat necessary to vaporize Water/#

$(212-70) 1 \text{ BTU} + .47 \text{ BTU} (600-212) + 970 \text{ BTU}$

$142 + 183 + 970 = 1295 \text{ BTU/# H}_2\text{O}$

$15,833,650 \times 1295 = 20,500,000,000 \text{ BTU for H}_2\text{O}$

15,833,650,000 BTU in oil

4,666,350,000 Total BTUs needed.

Coal @ 93700 BTU/# $\times 80\%$ efficiency = 10960 BTU/#

4,666,350,000 = $427000 \text{ # Coal needed}$
10960

$213.5 \text{ Tons @ } 10^\circ = 2135 \text{ # to dispose of 2 million gallons yearly.}$

(5)

A further estimate of additional necessary expense has been made based on the following plan of procedure.

Burning or evaporation of the solution will be carried on during the 7½ warm summer & fall months. The lagoon will continue as a dump spot and much necessary settling of suspended & foreign materials can take place naturally without costly filtering.

Three boilers will be used, 1 at each of the three boiler houses. Two 1 gal./hr. burners will be used on each boiler. Extra boilers will be piped up so that as repairs summer repairs are carried out, operations may be shifted with the fires. This plan will necessitate firing of the oil for approximately 7.7 months which uses up all our customary ice free time. ~~At present~~ ^{as a stage} we envisage using wheeled tankers at the Smelting & Blowing, and Boiler houses for storage of oil, and at #1 Boiler house, the empty 2,000 gal storage tank east of the storeroom can be utilized for storage. This will necessitate the purchase of two additional tankers and we assume two reconditioned used jobs may be purchased. The regular tanker which is now in service can be put into use as a transporter. We also envisage the filling pump as being set up near where our last summer's treatment plant was located with a discharge line running

6

to the patrol road for easy access by the tankers.

Alternate proposals with the same end result ~~has~~ have been estimated for comparative purposes. The second very similar plan would be to substitute 2 - 1000 gal. storage tanks for the tankers at #2 & #3 Boiler Houses, using the 2000 gal storage at #1 as before and using our present transport tanker as a supplier.

A third proposal would entail installing a below freezing level line from the logpoint #1 Boiler House (2000 gal. tank) and consume all the oil in #1 Boilers. 6 burners could be used in the cold months and 2 in the warm months. This capacity roughly totals the previous schemes.

In the event of a above normal build up of oil occurred sometime, an additional installation could be made for temporary use at the other Boiler Houses. This possible additional cost is not included in the estimate.

Proposal #1

Haul oil to three boiler houses during the non-freezing months, 2 ^{1/2} burners per boiler per house, supplied from 20,000 gal tank at #1, 2 tankers at #2 & 3, supply all oil by tankers.

Job	Mat.	Labr	Burden	Total
Cost of extra coal required -	2135 ⁰⁰			2135 ⁰⁰
Extra air required -				
Piping Boilers, install ^{pumps} burners, install pumps & air blowers -				3480 ⁰⁰
Purchase & re-fit 2 used tankers -	7000			7000
Pump & Installation - Logon to tankers -				1500
Seasonal Cost of trucking to Boilers - #(520/16.4 tankers)			2000 ⁰⁰	2000 ⁰⁰
				<u>16115</u>

Proposal #2

Haul oil to 3 boiler houses during the non-freezing months, 2 burners per boiler per house, supplied from ^{existing} 20,000 gal. tank at #1, 2 new 10,000 gal. tankers at #2 & #3, supply all oil by an existing tanker.

Job	Mat.	Labr	Burden	Total
Cost of extra coal required -	2135 ⁰⁰			2135 ⁰⁰
Extra air required -				-
Piping boilers, install ^{pumps} burners, install pumps & air blowers -				3480
Purchase & install 2-10,000 gal tankers -	3000			3000
Pump & installation - Logon to tankers -				1500
Seasonal cost of trucking to tankers -			3000 ⁰⁰	3000 ⁰⁰
				<u>13115</u>

Proposal #3

Supply oil to #1 Boiler house on a gas ground line thru a new frost free line. Dispose of oil in boilers at #1 by adding burners as required.

<u>Job</u>	<u>Mat</u>	<u>Labor</u>	<u>Material</u>	<u>Total</u>
------------	------------	--------------	-----------------	--------------

Cost of extra coal required -	2135 ⁰⁰			2135 ⁰⁰
Extra coal required -				
Install underground line				
Lagoon to #1 Boiler house -				12000
Pump & installation of Lagoon				2500
Piping boilers, install				
8" lines , pumps & lines -				1750 ⁰⁰
				<hr/> 18385

1750

July 28, 1961

FROM: A. J. HAYES

TO:

MR. L. B. STANLEY

#9(a)

RE: SOLUBLE OIL DISPOSAL

Since the disposal of soluble oil by spraying it into a boiler (a Fig. 3-4 requires the burning of more coal than would normally be used, the cost of this extra coal should be charged to disposal of soluble oil rather than to the cost of producing steam.

The factors upon which calculations are based are:

1. "Heat" soluble oil has a heating value of 19,000 B.T.U. per pound.
2. Soluble oil, as sprayed into the boiler, is 95% water and 5% "heat" soluble oil. ("Heat" soluble oil is assumed to have approximately the same density as water).
3. Boiler efficiency averages approximately 79.37%.
4. The heat content of coal, as fired, averages 13,720 B.T.U. per pound.

Calculations are as follows:

1. Heat content of "heat" soluble oil per gallon of diluted soluble oil -

$$1 \text{ gal.} \times 8.33 \frac{\text{lb.}}{\text{gal.}} \times .05 \times 19,000 \frac{\text{B.T.U.}}{\text{lb.}} = 7,914 \text{ B.T.U.}$$

2. Heat required to heat water from 60°F., vaporize it to steam, and superheat to 500°F. -

$$1 \text{ gal.} \times 8.33 \frac{\text{lb.}}{\text{gal.}} \times .95 (1697.1 - 28.06) = 9,963.4 \text{ B.T.U.}$$

3. Net heat required - 9,963.4 - 7,914 = 2,049.4 B.T.U.

4. Based on 1960 costs at #1 Boiler House, coal cost per pound = $\frac{\$308,126}{55,848,000 \text{ lbs.}} = \0.00547

3. Coal required per gallon of diluted soluble oil -

$$\frac{2,049.6}{13,720} = .14937 = .1494 \text{ lbs.}$$

4. Cost per gallon of diluted soluble oil -

$$\$0.00547 \times .1494 = \$0.00081$$

Effective immediately, L.D. Starlow will make out his "Boiler House Economy Report" for #1 Boiler House as indicated on the attached copy. Under the item "Coal Burned", an asterisk (*) will be entered after the tons of coal used in any boiler(s) in which soluble oil is being disposed of. Efficiencies, etc., for such boilers will be based on the net tons of coal burned (total coal less .1494 times the gallons of soluble oil disposed of). These same figures will be given to the Accounting Department when reporting coal used for cost purposes. Cont

D. J. HUTTON

DJH:CH

Cc to Messrs.

L.H. Nelson

E.T. O'Neill

J.W. MacMillan

J.D. Snider, Att: H. W. Smith - Pgh. Office

Enclosure

*Please check
I will
retype tomorrow*

Oct. 25, 1961

F L L

DISPOSAL OF WASTE SOLUBLE OILS AT MASSENA

The waste soluble oils and tramp lubricating oils resulting from the operation of the various rolling mills at Massena Works' Fabricating Division cause a serious disposal problem. For many years these oils were discharged directly by sewer to the Grasse River but with the shutdown of the Power Canal several years ago the consequent lowering of the flow of the Grasse and its transition from a fast flowing river to a slow quiet stream necessitated the cessation of such dumping.

As a temporary measure, an artificial pond was constructed of earth to contain these oils in an area North of the Fabricating Plant. It is a rectangular shaped reservoir of 115,000 sq. ft. surface area, with a sloping bottom of from 2' to 5' depth, capable of containing 3,400,000 gallons of liquid. Accurate records of the material discharged into the pond are not maintained but from available histories we can anticipate an annual dump in the neighborhood of 1,300,000 gallons of waste oils plus up to another 1,000,000 gallons of waste wash water from the mills' clean-up programs. The oil content of the waste as brought to the lagoon is from 3% to 15% depending on rolling practice, but when this is introduced to the pond with the accompanying wash water and the rainfall accumulation already there, we generally find the concentration of oil resulting to be under 1%, and still too strong to be discharged to the river. *the storage buildup from dumping operations* Since ~~our buildup~~ *is such* that evaporation will not suffice to maintain a safe pond level, another method has had to be developed to remove the excess.

Early in the summer of 1961, an installation was made at #1 Boiler House, whereby this pond solution could be introduced over the fire beds of two of the stoker fire/coal burning boilers. The solution is pumped through two atomizing spray nozzles at each boiler. During the month of September 1961, the operation was closely watched and the rate of disposal was found to be 60,000 gallons per nozzle per month or 120,000 gallons per month per boiler. Three months' trial burning has not brought any change in boiler condition. No firing difficulties have been encountered and after the

solution is delivered to the boiler house, no extra labor is involved in the operation. By drawing our requirements from the clean end of the lagoon, no trouble has been experienced from sludge pickup.

In September the lagoon was closely watched and it was found that 280,000 gallons of the solution disappeared due to surface evaporation. It was also observed that through the use of twelve spray nozzles installed above the pond surface and spraying at the rate of 70,000 gallons daily, an additional 54,000 gallons was evaporated during the month.

The cost of evaporating 100,000 gallons at the boilers has been found to be \$280. This includes pumping, trucking and an item to cover the cost of extra coal consumed. The main cost of pumping for the sprays is \$15.00 per month for electricity. Last year a chemical treatment plant was operated for a time during which trial period 240,000 gallons of solution was disposed of. Utilizing an alum~~um~~ solution under air pressure, followed by a quick release of this pressure, the plant was partially successful in that it released an effluent containing only 100 P.P.M. of oil. It did, however, leave a waste product of oil and alum in the form of a *floc* which defied the usual methods of destruction. The cost of treatment by this method was rather high, initially being \$3,300 for 100,000 gallons including equipment installation costs.

At present it is planned to continue the program of spraying the solution into the boilers as late as possible into the cold season and in all probability operations will commence again in the spring. The program of pond spraying to increase evaporation also seems to be a paying proposition and will undoubtedly be continued during the warm months.

January 13, 1964

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file

FROM: R. A. HALL

TO: MR. F. L. LETTERMAN

REPORT OF SOLUBLE OIL DISPOSAL - 1963

During 1963, the program of spraying soluble oil into the boilers for destruction was continued during the entire twelve months. The total amount of waste consumed was 1,730,425 gals. of which 1,457,425 gals. was consumed at #1 Boiler House and 273,000 gals. consumed at #3 Boiler House. The program was carried on during the entire year at #1 Boilers; at #3 Boilers it was instituted in August and continued until cold weather forced a discontinuance in November, as facilities at #3 Boilers are such that freezeup puts a stop to the practice. The smallest monthly total destroyed was in June with 64,300 gals, low because of an attempt to burn the floating top oils, which ended when we found that plugging of nozzles at the boilers cut our output so much that the practice was discontinued. The greatest monthly total was in January with 305,500 gallons destroyed.

Three lines of sprays with twelve (12) nozzles each were kept in operation through the non-freezing months. A relatively dry, warm summer aided greatly in keeping the pond to a safe level. In mid-summer, an oil reclamation company was contacted which periodically draws off to their tanker the floating tramp oils thus keeping the surface of the pond relatively free of the oil film which tends to prevent surface evaporation of the soluble oils.

The cost of operating the disposal program was as follows: Burden is included in the labor figures.

Oilers	-	\$ 267.47
Transportation	-	2,704.00
Approx. 170 tons Coal	-	1,782.34
Total Cost	-	<u>\$4,753.81</u>
Cost per gallon	-	\$.0027

0 053

This compares with 1962 cost per gallon of \$.0025.

During the year 60,763 gallons of soluble oils were purchased by the mills and used up in solutions varying from 3% to 15%. In addition 102,422 gallons of other oils were purchased and used in the plant, and it can only be assumed that the majority of these oils, as spent or contaminated, found their way to the pond.

R. A. HALL

RAH:jmd

FROM: R. A. HALL

TO: MR. D. R. LITTLE # 11

April 26, 1965

RE: REPORT OF SOLUBLE OIL DISPOSAL - 1964

Again, as in 1963, the program of spraying soluble oil into the boilers for destruction was continued during the entire year. During the month of June, during the strike, the consumption was considerably lower than for the other months. Total consumption was 1,847,500 gallons of which 499,000 gallons were burned at #3 Boiler House and 1,348,500 gallons were burned at #1 Boiler House. The largest monthly total was in September, 214,500 gallons; the lowest was June, the strike month with 32,500 gallons.

Three lines of sprays with 12 nozzles each were kept in operation through the non-freezing months. A dry, warm summer aided in keeping the pond level down. An oil reclamation company kept the floating lube oils from the top of the pond, keeping the surface film to a minimum.

The cost of operating the disposal program was as follows:

Labor & Burden	-	\$ 849.00
176 Tons Coal	-	\$1760.00
Total Cost	-	\$2609.00
Cost/Gallon	-	\$.0014

During the year, 5576 gallons of soluble oil were dispersed from stores and used in solutions varying from 3% to 15%. In addition, 91,850 gallons of other oils were purchased and used in the plant. It is assumed most of these oils, as spent or contaminated found their way to the lagoon.

R. A. HALL

RAH/bjs

Note: 41,800 gals. of floating oils were removed from the surface of lagoon by the oil reclamation company.

FROM: R. A. HALL

TO: MR. D. R. LITTLE

March 24, 1966

RE: REPORT OF SOLUBLE OIL DISPOSAL - 1965

In 1965, the usual program of spraying lagooned soluble oil into the boilers was continued throughout the entire year. Total destruction was 1,796,250 gallons of which 1,289,250 gallons were destroyed at #1 Boiler House and 567,000 gallons were destroyed at #3 Boiler House.

As in other years, three lines of sprays were operated thru the non-freezing months, to accelerate evaporation of the pond. An oil reclamation company removed some of the floating tramp oils early in the season but this practice was discontinued when the company which had been doing this work discontinued business. We should attempt to find a similar company in the area which would continue this practice as we have not been able to handle these oils in our spray system.

The cost of operating the disposal program was as follows:

Labor and Burden Charged	\$ 201.69
161 Tons Coal	1605.00
Trucking costs - 276 trips	2020.00
	<u>\$3826.69</u>
Cost/gallon	\$.0021

During the year 76,141 gallons of soluble oil were dispersed from stores and used in the various mills in solutions from 3 to 15%. In addition 115,752 gallons of other oils were purchased and used in the plant. Our assumption is that the most of these oils, as spent or contaminated, found their way to the lagoon.

At the end of the year we appeared to be keeping the lagoon at a safe, low level.

R. A. HALL

RAH/bjs

FROM: R. A. HALL

TO: MR. G. H. BLAKE

13

January 24, 1967

RE: 1966 REPORT ON DISPOSAL OF SOLUBLE OIL

In the year 1966, the program of spraying soluble oil into the boilers was continued. Total destruction was 1,085,500 gallons of which 916,500 gallons was destroyed at #1 Boiler House and 169,000 gallons destroyed at #3 Boiler House. This does not compare favorably with the 1965 season when a total of 1,796,250 gallons was destroyed, 1,289,250 at #1 and 567,000 at #3. As the year closed out, the smaller consumption was much in evidence in the pond, as the level is nearing the danger point. It was necessary to raise the level of the bank in one area to prevent spilling over.

At present it is impossible to use the system of disposal in the freezing months at #3 Boiler House as the oils are stored in the tanker parked outside the boiler house. A program is now underway to install a disposal system at #2 Boiler House so that the program can be continued there in the winter months as well as any summer months the boilers are in operation.

The three lines of sprays were operated thruout the non-freezing months to aid in disposal by additional evaporation. An oil reclamation company skimmed an estimated quantity of one hundred thousand gallons of floating tramp oils from the surface and our understanding was that this material was sprayed on secondary (or lower rated) dirt roads to stabilize the soils and aid in dust abatement.

The cost of operating the disposal program was as follows:

Labor & Burden charged	\$ 877.02
Cost of Extra Coal	\$1,120.00
Trucking Cost (165 Trips)	\$1,220.00
	<u>\$3,217.02</u>

Cost per Gallon \$0.0029

During the year 103,600 gallons of soluble oils were dispersed from stores and used in the various mills in solutions from three to 15%. In addition 277,760 gallons of other oils were purchased and used in the plant and our assumption is that most of these oils as spent or contaminated found their way to the lagoon.

It appears that we will have to increase our consumption rate via the boilers to keep the lagoon level down to a point where the danger from overflow is nil.

R. A. HALL

RAH/bsw

Cc: Messrs. J. H. Pierce
D. J. Hutton
J. H. Lavine
B. M. Watson

File(3)

056

FROM: R. A. HALL

TO: MR. G. H. BLAKE

January 18, 1968

RE: 1967 REPORT ON DISPOSAL OF SOLUBLE OIL

The program of spraying soluble oil into the boilers at the 3 plants was continued as usual in 1967. Total destruction for the year was 1,598,000 gallons of which 1,020,500 gallons was destroyed at #1 Boiler House, 487,500 gallons at #2 Boiler House and 90,000 gallons at #3 Boiler House. This represents a considerable increase over that destroyed in 1966 when 1,085,000 gallons was consumed. The pond level at freezeup in 1967 was at a safe level for the winter and we are enjoying a favorable amount of freeboard.

Consumption can continue at #1 and #2 Boiler Houses throughout the winter months because the oil supply tanks are located underground at #1 and indoors at #2. At #3, consumption is only through the non-freezing months as the oil is supplied directly from the tanker to the boilers at this location.

Three lines of sprays were operated throughout the non-freezing months to aid in disposal by increasing the evaporation from the surface of the lagoon. An oil reclamation company skimmed periodically all the floating oils which appeared and it is our understanding, this oil is used as a soil stabilizer and for dust abatement on secondary roads.

The cost of operating the disposal program was as follows:

Labor and Burden (R&M of Plant)	\$1706.50
Cost of extra coil to evaporate	1540.00
1,598,00 gals. soluble oil	
Trucking Cost (246 trips)	1968.00
	<u>\$5214.50</u>
Cost per gallon	.0032

During the year, 64,569 gallons of soluble oils were dispersed from stores and used in the various mills in solutions from 3 to 15%. In addition, 232,956 gallons of other oils were purchased and used in the plants and our assumption is that most of these spent or contaminated oils found their way to the lagoon.

In 1968, we will have to rebuild our spray system, which was not operating near its capacity in 1967.

R. A. HALL

Cc: Messrs. J. H. Pierce
J. H. Lavine
B. M. Watson
File Copy

FROM: R. A. HALL

TO: MR. G. H. BLAKE

January 21, 1969

RE: 1968 REPORT ON DISPOSAL OF SOLUBLE OIL

During the year 1968, 1,154,000 gallons of soluble oil and contaminated water was destroyed by spraying into the Boilers. Over 700,000 gallons were disposed of at #1 Boiler House and the remaining 400,000 was divided evenly between #2 and #3 Boiler Houses. During the two strike months and after for the months of August and September, no oil was destroyed so that the total for the year was about 450,000 gallons less than for 1967 when 1,598,000 gallons was the total destroyed. Consequently we went into the 1968-1969 winter season with a dangerously high level in the lagoon. At this time, burning should be increased or we may be in trouble (from overflowing) during the spring breakup and rains.

There were no changes in method of consumption; #1 and #2 Boiler Houses can consume oil all year around but #3 can handle it during non-freezing months only.

The sprays were operated during the summer and the oil reclamation company skimmed floating oils now and then.

The cost of operating for the season was as follows:

Labor & Burden (R&M)	\$3,066
Cost of extra coal to evaporate	
1,154,000 gallons	1,170
Trucking	790
	<u>\$5,026</u>
Cost per gallon	.0043

During the year 73,183 gallons of soluble oil were disposed from stores and used in the various mills in solution form. In addition 192,732 gallons of other oils were purchased and used in the plants. Presumably, much of these oils found their way to the lagoon.

The Electrical Department has in their schedule an R&M job for the electrical system supplying the pump and heaters at the pump house. This will probably be done in the spring after the freeze up period is past.

R. A. HALL

RAH:lmj

Cc: Messrs. J.H. Pierce
J.H. Lavine
B.M. Watson
W.D. Atkinson

File Copy

FROM: R. A. HALL

TO: MR. G. H. BLAKE

January 16, 1970

RE: 1969 REPORT ON DISPOSAL OF SOLUBLE OIL

In 1969 1,124,500 gallons of soluble oil and contaminated water was destroyed at the three boiler houses by burning or evaporation in the fires. In addition, 455,000 gallons were disposed of by placement in a hole in the ground. This last method was found necessary to prevent overflow of the lagoon. Although this stop-gap method of getting rid of a surplus did the job, it is not believed to be a desirable method as it introduces oily wastes into our ground water. *stop-gap method of getting rid of a surplus did the job, it is not believed to be a desirable method as it introduces oily wastes into our ground water. 244.1111 NORTH H. 216*

During the summer of 1969 the dike walls were raised by adding more earth to the tops of the dikes. A new lagoon was constructed at the east end of the main lagoon for storage of heavy and tramp lubricating oils. However, even with these changes and additions, we are operating the lagoon at a dangerously high level. Unless more oil is disposed of at the boiler houses, we will have to consider other alternate methods. However, chemical treatment has been found to be higher priced and larger lagoons are not an answer as they, too, will soon fill up.

Revisions to the sprays for evaporation speedup were under way when winter closed in, and this system will be completed and made operative in the spring. A storage tank for 6,000 gallons of oil was installed at No. 3 Boiler House so that burning could continue in the colder months. Finally, the pump house was repaired and the pumping system at the lagoon was overhauled in the fall months. New electrics were installed to replace the old weathered system.

During the warm months the Pierce Company salvaged and removed the floating tramp oils from the lagoon. Cost of operation for the season is as follows:

Labor and Burden (R & M)	\$2,294
Cost of coal to evaporate 1,124,500 gallons of water and oil (Coal @ \$11.51/ton)	1,220
Trucking	854
	<u>\$4,368</u>
Cost per gallon to destroy - .0028	

R. A. HALL

RAH:lb

CC: Messrs. J. H. Pierce
C. P. Fletcher
B. M. Watson - 31
W. D. Atkinson

059

17

Boiler House No.

842302

$$\begin{array}{r} 6500 \\ 135 \\ \hline 32500 \\ 19500 \\ \hline 65000 \\ 887500 \\ \hline \end{array}$$

18A

Caustic Dip Tanks		131
Oil heuron		By Receipt
Sol. Oil -	2750 gal	20000
	4620	
	13425	
	711	
	<u>21,506</u> gallons cons	
	- 6000	
	<u>15,506</u>	
		during '79

300,000 x .02
= 6000 gallons

180

OIL LAGOON

SURFACE AREA $600 \times 200 = 120,000 \text{ SQ FT}$
2.75 Acres

YEARLY DUMP - 2,700,000 GALS

$$= \frac{2.7 \text{ MG}}{7.48} = 360,000 \text{ CU. FT.}$$

AV DEPTH = $\frac{360,000}{120,000} = 3 \text{ FT/YR DUMPED IN LAGOON}$

OIL LAGOON

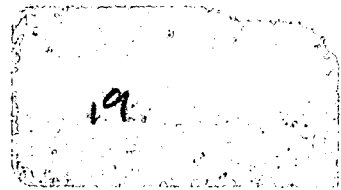
180

	<u>SOL. OIL</u>	<u>OTHER OILS</u>
1967	64,569	232,956
1968	73,183	192,732
1969	57,907	141,171
1970	37,450	98,245

063

Inventory Code

6/29/74



Nelson Merrick

(E. Mazzare office)

2680

QUESTIONS ON OIL LAGOON SYSTEM

SOLUBLE OIL - 40,000 GAL/YR. ~~500~~ MORE SOL. OIL 800,000 GAL.
OTHER OILS - 8,000 GAL/MONTH @ 5%

OIL SCAVENGERS - Pierce - NO CHG. OR PAY - CONTRACT UNTIL AUG. '74
OSWEGO - PAYING $2\frac{1}{2}$ ¢/GAL. FOR INCINERATOR FUEL
100-150,000 BTU/GAL

OIL FILTRATION SYSTEMS BEING UPGRADED TO REMOVE AMT.
OF OIL CHARGES.

SOLUBLE OIL $\frac{1}{2}$ % BEING BLEND INTO SECONDARY LAGOON
AT ABOUT 10 GPM

2 TANKS BRING SETUP - NOT YET INSTALLED

HYDRAULIC OILS - PYROVAL - 2 TANKS - SENT TO BE
RECLAIMED & BROUGHT BACK

1973 - 108 DRUMS PUMPED OUT & FILTERED (TOTAL)
70 DRUMS ASKING SENT TO MISSOURI
FOR RECLAIMING

Parent 6/79.

20

FROM: R. K. BROWN

TO:

MR. G. H. BLAKE

1000 - copied

not reviewed

March 17, 1969

RE: WASTE OIL LAGOON

Early in February, the oil lagoon was at a dangerously high level and seepage had started into the sewage oxidation pond. From February 11 to March 14, approximately 500,000 gallons were removed and dumped into an abandoned gravel pit on the hill, plus the normal amount burned in the Boiler Houses; reducing the oil lagoon to a safe level.

In addition, straight waste oils are being stored in two tanks behind Bldg. 73 Oil House for removal by the oil reclamation company. We are also planning to install a 6,000-gallon tank at #3 Boiler House to increase our disposal capability for soluble oil.

A check will be made on the feasibility of increasing our evaporating sprays, increasing the capacity of the lagoon by dredging, or other possible steps to prevent a reoccurrence of this problem next winter.

R. K. BROWN

RKB:CM

ALCOA		"ACC TANCE COPY"		PUR ORDER 2)	
PURCHASE ORDER NUMBER	P.O. DATE	BUYER	AUTH. NUMBER	DATE MATERIAL REQUIRED	DATE SHIPMENT PROMISED
MA 055110 PA	01AUG74	BK	AS REQUIRED		
VENDOR NUMBER					

SELLER PLEASE NOTE

INVOICES RENDERED AGAINST THIS ORDER MUST BE IN CONFORMANCE WITH INSTRUCTIONS PRINTED ON THE BACK HEREOF.

ALL SHIPMENTS, SHIPPING PAPERS, INVOICES AND CORRESPONDENCE MUST BE IDENTIFIED WITH THE PURCHASE ORDER AND VENDOR NUMBERS.

KEN PEIRCE OIL SERVICE
P.O. BOX 96
MOIRA,
N.Y. 12951

68232 5A 00

SHIP TO

ALUMINUM COMPANY OF AMERICA 055110
MASSENA
NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE
AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

SHIP VIA		F.O.B.		TERMS	
VENDORS TRUCK(SD)		DELIVERED		NET 30 DAYS	
ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S
			<p>FURNISH ALL LABOR, EQUIPMENT, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT SUCH QUANTITIES OF USED LUBRICANTS FROM AREAS AS DESIGNATED BY ALCOA'S ENGINEERING DEPARTMENT DURING THE PERIOD FROM AUGUST 1, 1974 THRU JULY 31, 1975.</p> <p>ALCOA WILL BE CHARGED \$.02/GAL. FOR ALL USED LUBRICANTS COLLECTED FROM AUGUST 1, 1974 THROUGH APRIL 30, 1975. ALL OTHER TIMES WILL BE AT NO EXPENSE TO ALCOA.</p> <p>SALVAGED LUBRICANTS TO BECOME THE PROPERTY OF THE CONTRACTOR AT NO CHARGE IN EXCHANGE FOR CONTRACTOR'S SERVICES AT NO CHARGE.</p> <p>NOTE: CLEARANCE MUST BE OBTAINED FROM BUYERS PURCHASING DEPT. BEFORE ANY WORK IS STARTED.</p>	NO CHARGE	DISTRIBU TIVE
FM/PT			CONTINUED ON PAGE 2 -		

NOTE: In accepting this order it is understood the Seller agrees to the terms and conditions shown above and printed on the back hereof. The Company hereby objects to any conflicting or additional terms or conditions.

ALUMINUM COMPANY OF AMERICA

LEN B. NEUBERT, Vice President, Purchasing, PITTSBURGH, PA. 15219

G.H. DUCKWORTH, DIST. PURCHASING AGENT

BY W.W. Hamilton
W.W. HAMILTON, BUYER

066

PURCHASE ORDER NUMBER M/ 055110 PA		P.C. TE 01AUG74		BUYER FM 6K		I.H. NUMBER		DATE MATERIAL REQUIRED		DATE SHIPMENT PROMISED	
---------------------------------------	--	--------------------	--	----------------	--	-------------	--	------------------------	--	------------------------	--

PAGE - 2 -

VENDOR NUMBER

KEN PEIRCE OIL SERVICE


68232 5A 00

SELLER PLEASE NOTE

INVOICES RENDERED AGAINST THIS ORDER MUST BE IN CONFORMANCE WITH INSTRUCTIONS PRINTED ON THE BACK HEREOF.

ALL SHIPMENTS, SHIPPING PAPERS, INVOICES AND CORRESPONDENCE MUST BE IDENTIFIED WITH THE PURCHASE ORDER AND VENDOR NUMBERS.

SHIP TO

SHIP VIA VENDOR'S TRUCK(SD)			F.O.B. DELIVERED			TERMS NET 30 DAYS					
ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS				PRICE & UNIT	A C S	- ACCOUNT CODE - COMMODITY CODE - STORES NUMBER		
<p>CONTRACTOR SHALL SIGN AND RETURN THE "ACCEPTANCE COPY" OF THIS CONTRACT IMMEDIATELY TO THE COMPANY'S MR G.H. DUCKWORTH, DISTRICT PURCHASING AGENT, MASSENA, NEW YORK 13662</p> <p>THIS PURCHASE ORDER IS ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS STATED HEREIN</p> <p>THIS <u>1</u> DAY OF <u>August</u> 19 <u>74</u></p> <p>PER <u><i>Kenneth W. Hamilton</i></u> CONTRACTOR</p>											
FM/FT											

NOTE: In accepting this order it is understood the Seller agrees to the terms and conditions shown above and printed on the back hereof. The Company hereby objects to any conflicting or additional terms or conditions.

DO NOT CHARGE NEW YORK OR ST. LAWRENCE COUNTY SALES OR USE TAX AS WE ARE AUTHORIZED TO PAY TAX DIRECTLY UNDER DIRECT PAYMENT PERMIT NO. 000016. OUR EMPLOYER'S IDENTIFICATION NO. IS 25-0317820

ALUMINUM COMPANY OF AMERICA

LEN B. NEUBERT, Vice President, Purchasing, PITTSBURGH, PA. 15219

G. H. DUCKWORTH, DIST. PUR. AGENT

BY *W.W. Hamilton*
W.W. HAMILTON
BUYER TEL. NO. (315) 764-4376

PURCHASE ORDER NUMBER PA 055110 PA		P.O. DATE 01AUG74		BUYER W.H. Hamilton		AUTH. NUMBER AS REQUIRED		DATE MATERIAL REQUIRED 26-32		DATE SHIPMENT PROMISED 33-39	
5-6		7-12		13-14		15-21		22		VENDOR NUMBER 58-66	

KEN PEIRCE OIL SERVICE
P.O. BOX 96
MOIRA
N.Y. 12951

Elmwood
Per Mr. Hamilton
6585-06
Letter 7/14/75
529-8700
515-529-7387

SHIP TO

ALUMINUM COMPANY OF AMERICA 055110
MASSENA
NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE
AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

REQUISITION WRITER J. FARRELL-73A	US
IN PLANT DELIVERY LOCATION	

SHIP VIA 67-68 VENDORS TRUCK(SD)	F.O.B. DELIVERED	TERMS NET 30 DAYS
--	----------------------------	-----------------------------

ITEM NO. 15-17	QUANTITY 18-24	UNIT MEAS. 25-27	DESCRIPTION AND SPECIFICATIONS 28-44	PRICE & UNIT 45-74 75-77	A C S	18-27 - ACCOUNT CODE - COMMODITY CODE - STORES NUMBER 28-38
			<p>FURNISH ALL LABOR, EQUIPMENT, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT SUCH QUANTITIES OF USED LUBRICANTS FROM AREAS AS DESIGNATED BY ALCOA'S ENGINEERING DEPARTMENT DURING THE PERIOD FROM AUGUST 1, 1974 THRU JULY 31, 1975.</p> <p>ALCOA WILL BE CHARGED \$.02/GAL. FOR ALL USED LUBRICANTS COLLECTED FROM AUGUST 1, 1974 THROUGH APRIL 30, 1975. ALL OTHER TIMES WILL BE AT NO EXPENSE TO ALCOA.</p> <p>SALVAGED LUBRICANTS TO BECOME THE PROPERTY OF THE CONTRACTOR AT NO CHARGE IN EXCHANGE FOR CONTRACTOR'S SERVICES AT NO CHARGE.</p> <p>NOTE: CLEARANCE MUST BE OBTAINED FROM BUYERS PURCHASING DEPT. BEFORE ANY WORK IS STARTED.</p>	NO CHARGE		DISTRIBUTIVE

FM/FT

CONTINUED ON PAGE 2 -

ALUMINUM COMPANY OF AMERICA

G.H. DUCKWORTH, DIST. PURCHASING AGENT

W.W. Hamilton
W.W. HAMILTON, BUYER

PURCHASE ORDER NUMBER		P.O. DATE		BUYER		AUTH. NUMBER		DATE MATERIAL REQUIRED		PROMISED	
MA 841755		28 MAY 75		GD				IMMED		30 SEP 75	
3-6 7-12 13-14		15-21 22		23-25				26-32		33-39	

841755 #22

VENDOR NUMBER 58-66

KEN PEIRCE OIL SERVICE
P.O. BOX 96
MOIRA,
NEW YORK 12951

682325A 00

~~514-529-1700~~
514-529-~~7777~~ 7387

SHIP TO

ALUMINUM COMPANY OF AMERICA 841755
MASSENA
NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE
AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

REQUISITION WRITER	U:
R. J. SHARPSTEN	59
IN PLANT DELIVERY LOCATION	

SHIP VIA		CONTRACTOR'S CHOICE(SD)		F.O.B. OWNER'S JOBSITE		TERMS			
ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS			PRICE & UNIT		A C S	
15-17	18-24	25-27	28-64			65-74 75-77		- ACCOUNT CODE 18-27 - COMMODITY CODE 28-38 - STORES NUMBER	
			FURNISH ALL INSURANCE, HAULING, UN-LOADING - TAXES, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT USED LUBRICANT FROM TANKS LOCATED IN BLDG. 140 FOR THE PERIOD BEGINNING 30MAY75 AND ENDING 30SEP75. DURING THIS PERIOD, NO CHARGES WILL ACCRUE TO BUYER FOR THESE SERVICES. LUBRICANTS REMOVED SHALL BECOME THE PROPERTY OF CONTRACTOR AS PAYMENT FOR HIS SERVICES. CONTRACTOR SHALL SIGN AND RETURN THE "ACCEPTANCE COPY" OF THIS CONTRACT IMMEDIATELY TO THE COMPANY'S MR. G. H. DUCKWORTH, DISTRICT PURCHASING AGENT, MASSENA, NEW YORK. THIS PURCHASE ORDER IS ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS STATED HEREIN THIS _____ DAY OF _____, 19 _____.					DISTRIBUTIVE	
			CONTRACTOR						

EH

DO NOT CHARGE NEW YORK OR ST. LAWRENCE COUNTY SALES OR USE TAX AS WE ARE AUTHORIZED TO PAY TAX DIRECTLY UNDER DIRECT PAYMENT PERMIT NO. 000016. OUR EMPLOYER'S IDENTIFICATION NO. IS 25-0317820

ALUMINUM COMPANY OF AMERICA 0 067
G. H. DUCKWORTH, DIST. PUR. AGENT
BUYER TEL. NO. (315) 764-4373

PURCHASING DEPARTMENT RL

#14

REQUISITION NUMBER 841655	REQ. DATE 15 May 75	BUYER 22-24	PAGE NO 1	AUTH. NUMBER 25-32	DATE MATTER REQUIRED Immed.
COMPANY TO BE CHARGED Aluminum Company of America				USE 529-7700	
SHIP TO Massena, N. Y. 13662				<i>Small contract acceptance copy</i> 30 Sep 75	
SHIP VIA <i>Contractor's House</i>		F.O.B. <i>Owner's Gate</i>		TERMS ---	
GENERAL DESCRIPTION (15-54)				COMMODITY CODE 55-65	ESTIMATED TOTAL COST 166-73

ITEM NO	QUANTITY	UNIT MEAS	DESCRIPTION AND SPECIFICATIONS	ESTIMATED COST PER UNIT	A C S	ACCOUNT CODE COMMODITY CODE STORES NUMBER
			Arrange for pick-up & removal of skim from soluble oil skim tank, Continuous Mill - Bldg. 140 <i>20-Ker Lane Oil Service</i> Ref. Peirce Oil Company c/o Mr Ken Peirce Moirs, New York			<i>Distribution</i>
			<i>Secured all insurance. Paying on body tubes insurance and all other things necessary to collect used lubricant from tubes heated on Body 140 for the period beginning 30 May 75 and ending 30 Sept 75.</i> <i>During the period no charges will accrue to Buyer for these services.</i> <i>Subs to removal should be made</i>			
REQUISITIONED BY R. J. Sharpsten				DATE Bx 59	AUTHORIZED APPROVAL R. J. Sharpsten	
DATE 15 May 75				PURCHASING APPROVAL 13 1975		

SHADED AREA FOR PURCHASING DEPARTMENT USE

MISCELLANEOUS RECEIVING REPORT

PURCHASE ORDER NUMBER MA 055110 PA		P.O. DATE 01AUG74		BUYER BK		AUTH. NUMBER AS REQUIRED		DATE MATERIAL REQUIRED 26-32		DATE SHIPMENT PROMISED 33-39	
5-6	7-12	13-14	15-21	22	VENDOR NUMBER 58-44		SHIPPER		PRE-PRICE AMT.	PRICED BY	DELIVER TO

KEN PEIRCE OIL SERVICE
P.O. BOX 96
MOIRA,
N.Y. 12951

682325A 00

SHIPPING POINT	LESS TRANS. AMT.	FRT. LIST NO.	DATE PASSED
VIA	TAX AMOUNT	CHGD TO ACCOUNT	
PRO NO.	AMOUNT	INVOICE LIST NO.	DATE PASSED
CAR NO.	ADJ.	ADJ. TO ACCT. NO.	DR. CR.
CAR SEALS	WORK ORDER	ACCOUNT NO.	MAT'L VALUE
			FREIGHT

SHIP TO

ALUMINUM COMPANY OF AMERICA 055110
MASSENA
NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

REQUISITION WRITER
J. FARRELL-73A
IN PLANT DELIVERY LOCATION

SHIP VIA 67-68	F.O.B.	TERMS
VENDORS TRUCK(SD)	DELIVERED	NET 30 DAYS

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S	ACCOUNT CODE	18-27	QUANTITY RECEIVED	PRE-PRICE AMOUNT
15-17	18-24	25-27	28-44	65-74 75-77		COMMODITY CODE	28-38		
			FURNISH ALL LABOR, EQUIPMENT, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT SUCH QUANTITIES OF USED LUBRICANTS FROM AREAS AS DESIGNATED BY ALCOA'S ENGINEERING DEPARTMENT DURING THE PERIOD FROM AUGUST 1, 1974 THRU JULY 31, 1975.	NO CHARGE		DISTRIBUTIVE			
			ALCOA WILL BE CHARGED \$.02/GAL. FOR ALL USED LUBRICANTS COLLECTED FROM AUGUST 1, 1974 THROUGH APRIL 30, 1975. ALL OTHER TIMES WILL BE AT NO EXPENSE TO ALCOA.	Total 23400 gal. for		090083			468.00
			SALVAGED LUBRICANTS TO BECOME THE PROPERTY OF THE CONTRACTOR AT NO CHARGE IN EXCHANGE FOR CONTRACTOR'S SERVICES AT NO CHARGE.	may 1975					
			NOTE: CLEARANCE MUST BE OBTAINED FROM BUYERS PURCHASING DEPT. BEFORE ANY WORK IS STARTED.	total 23400 gal. for march april					
				JUN 20 1975					
									468.00

P.O.# MA1035110 (PA)

PEIRCE OIL SERVICE

TEL. 668-6782

518-529-7100

30 November 1964

R.D. #2 - Box 32

Central Square, N.Y. 13036

Waltham, Mass. 02154

Sold to

Allen Bernstein

DATE _____

May 73

Massena, New York

#16

V. Code = ^{Massena, New York} 682325 A 00

Terms: Net Cash

[illegible]

JUN 30 1973

Peirce Oil Service
30 Brookfield Rd.
Waltham Mass

Pickup at Alcoa
Territory Memna
Gallons 2600
Date 3/5/75

Signed by J. [Signature]

10001

(4)

PEIRCE OIL SERVICE

411 Waverley Oaks Rd. Waltham, Mass. 02154
894-0251

DELIVERED TO Peirce Oil

TERRITORY Memna

DRIVER John White

TRUCK NO. 25

TRAILER NO.

RECEIVED 2200

DATE 4/27/75

RECEIVED BY [Signature]

☐ C C

☐ W D

☐ W D

No. 22089

PEIRCE OIL SERVICE, N. Y.

GOVERNMENT
EXHIBIT

17

058506 23

PURCHASE ORDER NUMBER			P.O. DATE		BUYER		AUTH. NUMBER		DATE MATERIAL REQUIRED		DATE SHIPMENT PROMISED	
MA 058506 PA			06AUG75		HM		AS REQUIRED		26-32		33-39	
5-6	7-12	13-14	15-21	22	23-25	VENDOR NUMBER 58-66						

KEN PEIRCE OIL SERVICE
P.O. BOX 96
MOIRA
N.Y. 12951

68232 5A 00

518-5297700

see
Ma 060402

SHIP TO

ALUMINUM COMPANY OF AMERICA 058506
MASSENA
NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE
AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

REQUISITION WRITER
J. FARRELL-73A
IN PLANT DELIVERY LOCATION

SHIP VIA 67-68	F.O.B.	TERMS
VENDORS TRUCK(SD)	DELIVERED	NET 30 DAYS

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S	- ACCOUNT CODE 18-27 - COMMODITY CODE 28-38 - STORES NUMBER
15-17	18-24	25-27	28-64	65-74 75-77		
			FURNISH ALL LABOR, EQUIPMENT, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT SUCH QUANTITIES OF USED LUBRICANTS FROM AREAS AS DESIGNATED BY ALCOA'S ENGINEERING DEPARTMENT DURING THE PERIOD FROM AUGUST 1, 1975 THRU JULY 31, 1976. ALCOA WILL BE CHARGED \$.02/GAL. FOR ALL USED LUBRICANTS COLLECTED FROM AUGUST 1, 1975 THROUGH APRIL 30, 1976. ALL OTHER TIMES WILL BE AT NO EXPENSE TO ALCOA. SALVAGED LUBRICANTS TO BECOME THE PROPERTY OF THE CONTRACTOR AT NO CHARGE IN EXCHANGE FOR CONTRACTOR'S SERVICES AT NO CHARGE. NOTE: CLEARANCE MUST BE OBTAINED FROM BUYERS PURCHASING DEPT. BEFORE ANY WORK IS STARTED.	NO CHARGE		DISTRIBUTIVE
FT			CONTINUED ON PAGE 2 -			

ALUMINUM COMPANY OF AMERICA

G. H. DUCKWORTH, DIST. PURCHASING AGENT

W. W. HAMILTON, BUYER

068

14Jul75

578-529-7700

Gov't
Exhibit
#19

Ken Peirce Oil Service
P. O. Box 96
Moirra, New York 12951

Re: Blanket Order MA 055110 PA

Gentlemen:

The captioned blanket order expires July 31, 1975.
Please advise if price, terms and all conditions of this order
would remain firm as is if we were to extend the expiration date
to July 31, 1976.

Very truly yours,

ALUMINUM COMPANY OF AMERICA

oh
H. Hamilton

W. W. HAMILTON

Buyer - Tel.No. (315) 764-4376

WWH/ft

058506
(Review)



"ACCEPTANCE COPY"

PURCHASE ORDER

PURCHASE ORDER NUMBER

P.O. DATE

BUYER

AUTH. NUMBER

DATE MATERIAL
REQUIREDDATE SHIPMENT
PROMISED

MA 038506 PA

06AUG75

HM

AS REQUIRED



VENDOR NUMBER

SELLER PLEASE NOTE

KEN PEIRCE OIL SERVICE
P.O. BOX 96
MOIRA,
N.Y. 12951

68232 5A 00

Gov't
exhibit
#20

INVOICES RENDERED AGAINST THIS
ORDER MUST BE IN CONFORMANCE
WITH INSTRUCTIONS PRINTED ON THE
BACK HEREOF.

ALL SHIPMENTS, SHIPPING PAPERS,
INVOICES AND CORRESPONDENCE
MUST BE IDENTIFIED WITH THE PUR-
CHASE ORDER AND VENDOR NUMBERS.

SHIP TO

ALUMINUM COMPANY OF AMERICA 058506
MASSENA
NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE
AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

SHIP VIA

F.O.B.

TERMS

VENDORS TRUCK(SD)

DELIVERED

NET 30 DAYS



ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S	- ACCOUNT CODE - COMMODITY CODE - STORES NUMBER
			<p>FURNISH ALL LABOR, EQUIPMENT, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT SUCH QUANTITIES OF USED LUBRICANTS FROM AREAS AS DESIGNATED BY ALCOA'S ENGINEERING DEPARTMENT DURING THE PERIOD FROM AUGUST 1, 1975 THRU JULY 31, 1976.</p> <p>ALCOA WILL BE CHARGED \$.02/GAL. FOR ALL USED LUBRICANTS COLLECTED FROM AUGUST 1, 1975 THROUGH APRIL 30, 1976. ALL OTHER TIMES WILL BE AT NO EXPENSE TO ALCOA.</p> <p>SALVAGED LUBRICANTS TO BECOME THE PROPERTY OF THE CONTRACTOR AT NO CHARGE IN EXCHANGE FOR CONTRACTOR'S SERVICES AT NO CHARGE.</p> <p>NOTE: CLEARANCE MUST BE OBTAINED FROM BUYERS PURCHASING DEPT. BEFORE ANY WORK IS STARTED.</p>	NO CHARGE		DISTRIBUTIVE
FT			CONTINUED ON PAGE 2 -			

NOTE: In accepting this order it is understood the Seller agrees to the terms and conditions shown above and printed on the back hereof. The Company hereby objects to any conflicting or additional terms or conditions.

ALUMINUM COMPANY OF AMERICA

LEN B. NEUBERT, Vice President, Purchasing, PITTSBURGH, PA. 15219

G. H. DUCKWORTH, DIST. PURCHASING AGENT

BY W. W. Hamilton
W. W. HAMILTON, BUYER

PURCHASE ORDER

NUMBER 38506 PA	P.O. DATE 06AUG75	BUYER HM	AUTH. NUMBER	DATE MATERIAL REQUIRED EXP. DATE	DATE SHIPMENT PROMISED
--------------------	----------------------	-------------	--------------	--	------------------------

PAGE - 2 -

KEN PEIRCE OIL SERVICE

VENDOR NUMBER

682325A 00

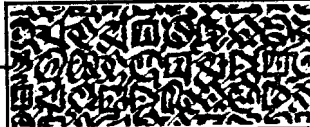
SELLER PLEASE NOTE

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SHIP TO

Gov't
Exhibit
#21

SHIP VIA VENDOR'S TRUCK(SD)		F.O.B. DELIVERED		TERMS NET 30 DAYS			
ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S	- ACCOUNT CODE - COMMODITY CODE - STORES NUMBER	
<p>SELLER SHALL SIGN AND RETURN THE "ACCEPTANCE COPY" OF THIS ORDER IMMEDIATELY TO THE COMPANY'S MR. G.H. DUCKWORTH, DISTRICT PURCHASING AGENT, MASSENA, NEW YORK 13662</p> <p>THIS PURCHASE ORDER IS ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS STATED HEREIN</p> <p>THIS <u>1</u> DAY OF <u>Aug</u> 19 <u>75</u></p> <p><u>Kenneth M. Peirce</u> PER <u>SELLER</u></p> <p>ALCOA</p>							
FT							

NOTE: In accepting this order it is understood the Seller agrees to the terms and conditions shown above and printed on the back hereof. The Company hereby objects to any conflicting or additional terms or conditions.

DO NOT CHARGE NEW YORK OR ST. LAWRENCE COUNTY SALES OR USE TAX AS WE ARE AUTHORIZED TO PAY TAX DIRECTLY UNDER DIRECT PAYMENT PERMIT NO. 000016. OUR EMPLOYER'S IDENTIFICATION NO. IS 25-0317820

ALUMINUM COMPANY OF AMERICA

LEN B. NEUBERT, Vice President, Purchasing, PITTSBURGH, PA. 15219

G. H. DUCKWORTH, DIST. PUR. AGENT

BY W W Hamilton

W.W. HAMILTON

BUYER TEL. NO. (315) 764-4376

MEMO

195

Ham

CALLER

OF

PHONE NO.

MESSAGE:

Renewal of Ma 055110

He said Terms Conditions
etc would remain
same if renewed
for another year!

SIGNED

SF-3275

ft

DATE

1/23

TIME

1:25

- ☒ PHONED
- ☐ WANTS TO SEE YOU
- ☐ WAS IN TODAY
- ☐ PLEASE CALL
- ☐ WILL CALL AGAIN
- ☐ URGENT
- ☐ SEE BELOW
- ☐ RETURNED YOUR CALL

Renew as no

060402

24

060402

PURCHASE ORDER NUMBER	P.O. DATE	BUYER	AUTH. NUMBER	DATE MATERIAL REQUIRED	DATE SHIPMENT PROMISED
5-6 MA 060402 PA-14	16 JUL 76 22	HM 23-25	AS REQUIRED	26-32	33-39
VENDOR NUMBER 58-66					

KEN PEIRCE OIL SERVICE
P.O. BOX 96
MOIRA
N.Y. 12951

682325A 00

Expired

MA 080354

SHIP TO

ALUMINUM COMPANY OF AMERICA 060402
MASSENA

NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE
AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

REQUISITION WRITER
J. FARRELL-73A

IN PLANT DELIVERY LOCATION

SHIP VIA 67-68

F.O.B.

TERMS

VENDORS TRUCK(SD)

DELIVERED

NET 30 DAYS

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S	ACCOUNT CODE	COMMODITY CODE	STORES NUMBER
15-17	18-24	25-27	28-64	65-74	75-77	18-27	28-38	
			<p>FURNISH ALL LABOR, EQUIPMENT, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT SUCH QUANTITIES OF USED LUBRICANTS FROM AREAS AS DESIGNATED BY ALCOA'S ENGINEERING DEPARTMENT DURING THE PERIOD FROM AUGUST 1, 1976 THRU JULY 31, 1977.</p> <p>ALCOA WILL BE CHARGED \$.02/GAL. FOR ALL USED LUBRICANTS COLLECTED FROM AUGUST 1, 1976 THROUGH APRIL 30, 1977. ALL OTHER TIMES WILL BE AT NO EXPENSE TO ALCOA.</p> <p>SALVAGED LUBRICANTS TO BECOME THE PROPERTY OF THE CONTRACTOR AOO CHARGE IN EXCHANGE FOR CONTRACTOR'S SERVICES AT NO CHARGE.</p> <p>CLEARANCE MUST BE OBTAINED FROM BUYERS PURCHASING DEPT. BEFORE ANY WORK IS STARTED.</p> <p>CONTINUED ON PAGE 2 -</p>	NO CHARGE				
FT/SR			NOTE:					

NO CHARGE

DISTRIBUTIVE

Total 266.00

ALUMINUM COMPANY OF AMERICA

G.H. DUCKWORTH, DIST. PURCHASING AGENT

W.W. HAMILTON, BUYER

PURCHASE ORDER NUMBER		P.O. DATE		BUYER		AUTH. NUMBER		DATE MATERIAL REQUIRED		DATE SHIPMENT PROMISED	
MA 060402 PA 13-14		16 JUL 76		HM 23-25				26-32		33-39	
VENDOR NUMBER 58-66											

PAGE - 2 -

KEN PEIRCE OIL SERVICE

682325A 00

Gov't
Exhibit
#23

SHIP TO

SHIP VIA 67-68				F.O.B.		TERMS		REQUISITION WRITER	
VENDOR'S TRUCK(SD)				DELIVERED		NET 30 DAYS		IN PLANT DELIVERY LOCATION	
ITEM NO. 15-17	QUANTITY 18-24	UNIT MEAS. 25-27	DESCRIPTION AND SPECIFICATIONS 28-64			PRICE & UNIT 65-74 75-77		A C S - ACCOUNT CODE 18-27 - COMMODITY CODE 28-38 - STORES NUMBER	
<p>SELLER SHALL SIGN AND RETURN THE "ACCEPTANCE COPY- OF THIS ORDER IMMEDIATELY TO THE COMPANY'S MR G.H. DUCKWORTH, DISTRICT PURCHASING AGENT, MASSENA, NEW YORK 13662</p> <p>THIS PURCHASE ORDER IS ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS STATED HEREIN</p> <p>THIS _____ DAY OF _____ 19 _____</p> <p>PER _____ SELLER</p>									
FT/SR									

DO NOT CHARGE NEW YORK OR ST. LAWRENCE COUNTY SALES OR USE TAX AS WE ARE AUTHORIZED TO PAY TAX DIRECTLY UNDER DIRECT PAYMENT PERMIT NO. 000016. OUR EMPLOYER'S IDENTIFICATION NO. IS 25-0317820

ALUMINUM COMPANY OF AMERICA

G. H. DUCKWORTH, DIST. PUR. AGENT

W. W. Hamilton

W.W. HAMILTON
BUYER TEL. NO. (315) 764-4376



ALCOA "ACCEPTANCE COPY"

PURCHASE ORDER

PURCHASE ORDER NUMBER

P.O. DATE

BUYER

AUTH. NUMBER

DATE MATERIAL REQUIRED

DATE SHIPMENT PROMISED

MA 060402, PA

16 JUL 76

HM

AS REQUIRED

VENDOR NUMBER

SELLER PLEASE NOTE

682325A 00

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ALL SHIPMENTS, SHIPPING PAPERS, INVOICES AND CORRESPONDENCE MUST BE IDENTIFIED WITH THE PURCHASE ORDER AND VENDOR NUMBERS.

KEN PEIRCE OIL SERVICE
P.O. BOX 96
MOIRA,
N.Y. 12951

SHIP TO

Gov't
Exhibit
#24

ALUMINUM COMPANY OF AMERICA 060402

MASSENA
NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE

AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

ITEM NO.	QUANTITY	TIME MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S	- ACCOUNT CODE - COMMODITY CODE - STORES NUMBER
			<p>FURNISH ALL LABOR, EQUIPMENT, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT SUCH QUANTITIES OF USED LUBRICANTS FROM AREAS AS DESIGNATED BY ALCOA'S ENGINEERING DEPARTMENT DURING THE PERIOD FROM AUGUST 1, 1976 THRU JULY 31, 1977.</p> <p>ALCOA WILL BE CHARGED \$.02/GAL. FOR ALL USED LUBRICANTS COLLECTED FROM AUGUST 1, 1976 THROUGH APRIL 30, 1977. ALL OTHER TIMES WILL BE AT NO EXPENSE TO ALCOA.</p> <p>SALVAGED LUBRICANTS TO BECOME THE PROPERTY OF THE CONTRACTOR NO CHARGE IN EXCHANGE FOR CONTRACTOR'S SERVICES AT NO CHARGE.</p> <p>NOTE: CLEARANCE MUST BE OBTAINED FROM BUYERS PURCHASING DEPT. BEFORE ANY WORK IS STARTED.</p>	NO CHARGE		DISTRIBUTIVE

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ALUMINUM COMPANY OF AMERICA

LEN B. NEUBERT, Vice President, Purchasing, PITTSBURGH, PA. 15219

G.H. DUCKWORTH, DIST. PURCHASING AGENT

BY *W.W. Hamilton*

W.W. HAMILTON, BUYER



ALCOA "ACCEPTANCE COPY"

PURCHASE ORDER

PURCHASE ORDER NUMBER

P.O. DATE

BUYER

AUTH. NUMBER

DATE MATERIAL
REQUIREDDATE SHIPMENT
PROMISED

MA 060402, PA

16 JUL 76

HM

VENDOR NUMBER

PAGE - 2 -

KEN PEIRCE OIL SERVICE

682325A 00

SELLER PLEASE NOTE

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SHIP TO

Gov't
Exhibit
#25

SHIP VIA

F.O.B.

TERMS

VENDOR'S TRUCK(SD)

DELIVERED

NET 30 DAYS

ITEM NO. QUANTITY UNIT MEAS.

DESCRIPTION AND SPECIFICATIONS

PRICE & UNIT

A
C
S
= ACCOUNT CODE
= COMMODITY CODE
= STORES NUMBER

SELLER SHALL SIGN AND RETURN THE "ACCEPTANCE COPY" OF THIS ORDER IMMEDIATELY TO THE COMPANY'S MR. G.H. DUCKWORTH, DISTRICT PURCHASING AGENT, MASSENA, NEW YORK 13662

THIS PURCHASE ORDER IS ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS STATED HEREIN

THIS 2 DAY OF Aug 1976

Kenneth H. Peirce
PER SELLER

FT/SR

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DO NOT CHARGE NEW YORK OR ST. LAWRENCE COUNTY SALES OR USE TAX AS WE ARE AUTHORIZED TO PAY TAX DIRECTLY UNDER DIRECT PAYMENT PERMIT NO. 000016. OUR EMPLOYER'S IDENTIFICATION NO. IS 25-0317820

ALUMINUM COMPANY OF AMERICA

LEN B. NEUBERT, Vice President, Purchasing, PITTSBURGH, PA. 15219

G. H. DUCKWORTH, DIST. PUR. AGENT

BY W.W. Hamilton
W.W. HAMILTON
BUYER TEL. NO. (315) 764-4376

Peirce Waste Oil Service

"Collectors of Waste Oils"

1200 COMMONWEALTH AVENUE
ALLSTON, MASSACHUSETTS 02134
617/739-2200



23 November, 1977

Mr. W. W. Hamilton,
Purchasing Department
Aluminum Company of America
Post Office Box 150
Massena, New York

Dear Mr. Hamilton,

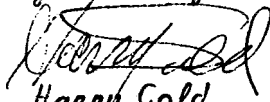
Please be advised that this letter is a formal bid for the removal of waste oils as generated by your facility. This bid is submitted by our Company for purposes of gaining the award of the contract as now being offered by "Alcoa". The contract in question is for the collection of waste liquids as located in your Reclamation Pond at your plant site.

We will pay your Company("Alcoa") at the rate of five cents per gallon for collected usable waste oils. All collections will be performed by our Company and will be performed at your designated Reclamation Pond.

Would you please advise me as to the outcome of the award?

Thank you.

Yours very truly,


Harry Gold

Mail to be directed to;
Box 114
N. Weymouth, Massachusetts 02191

070

26

PURCHASING DEPARTMENT REQUISITION

REQUISITION NUMBER	REQ. DATE	PAGE NO.	AUTH. NUMBER	DATE MATERIAL REQUIRED	DATE SHIPMENT PROMISED
	10-21			10-20	3/14/79

SHIP TO: LO - Parent Out Co
PO Box 51
Moua NY 12957

USE: 5050 A00

MA 080354
(supersedes previous MA 060402)

SHIP VIA: Vendors Tr

GENERAL DESCRIPTION (10-64): (318) 529-2230

COMMODITY CODE (10-65):

ESTIMATED TOTAL COST (60-73):

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	ESTIMATED COST PER UNIT	A C S	ACCOUNT CODE COMMODITY CODE STORES NUMBER
1	1	lot	Furnish all labor, equipment insurance and all other things necessary to collect used lubricants from Alcoa's reclamation pond during the period from 01 Apr 78 thru 31 Mar 79.	950.00 LOT		A 0094196
			The salvaged oil will become the property of the contractor at the point of removal from our works.			
			Alcoa makes no representation or guarantee as to the quantity nor the content of the used lubricants.			

Gov't Exhibit #26

071A

IN PLANT DELIVERY LOCATION		SURPLUS PITTSBURGH		DATE	STOREKEEPER	DATE
REQUISITIONED BY: J Murphy		DATE: 73	AUTHORIZED APPROVAL: [Signature]		DATE:	

SHADED AREA FOR PURCHASING DEPARTMENT USE

PURCHASING DEPARTMENT REQUISITION

REG. NO.		REQ. DATE		PAGE NO.		AUTH. NUMBER		DATE MATERIAL REQUIRED		DATE SHIPMENT PROMISED	
		10-21						10-22		10-23	
COMPANY TO BE CHARGED						USE					
SHIP TO						Gov't Exhibit #27					
SHIP VIA						TERMS					
GENERAL DESCRIPTION (10-24)						COMMODITY CODE (10-25)		ESTIMATED TOTAL COST (10-26)			
ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS			ESTIMATED COST PER UNIT		ACCOUNT CODE	COMMODITY CODE	STORES NUMBER	
			In return for such lubricants, Contractor agrees to pay Alcoa \$750.00/year \$475.00 on 01 May 78 and \$475.00 on 06 Nov 78.								
			Acceptance Copy								
IN PLANT DELIVERY LOCATION						SURPLUS PITTSBURGH		DATE	STOREKEEPER	DATE	
REQUISITIONED BY (74-75)			DATE	AUTHORIZED APPROVAL		DATE		RECEIVED APPROVAL DATE			

SHADED AREA FOR PURCHASING DEPARTMENT USE

Gov't
Exhibit
#28

PARENT OIL COMPANY
MOIRA, NEW YORK

October 24, 1977

Aluminum Company of America
Massena, New York 13632

Attention: W. W. Hamilton

Gentlemen:

In response to your request for a quotation to remove waste oil from your Alcoa facilities, I am submitting two (2) proposals.

The first proposal being to pay Alcoa a Flat Rate of \$950.00 dollars for the sole right to remove said waste oil from Alcoa's reclamation pond. This amount would cover the period from November 1, 1977 thru November 1, 1978. The above mentioned amount to be paid in two equal installments, 1. falling due 30 days from acceptance of the contract and the second payment six (6) months from said date. The amount and content of said waste oil unknown.

The second proposal is to pay Alcoa \$.05¢ per gallon for all waste oil removed from your premises between November 1, 1977 and November 1, 1978. The amount and content of said waste oil being unknown. This amount (gallons times \$.05¢) to be paid monthly or quaterly.

Awaiting your earliest reply. Thank you.

Sincerely yours,

PARENT OIL COMPANY

Wallace Parent Jr.
Wallace Parent Jr.

Credit -

WP/at

cc To H. B. Bunt
12/1/77

718

file

#29

1977 October 18

- ✓ 1. Parent Oil, P. O. Box 51, Moira, N. Y. 12957
2. Ken Pierce Oil Service, 30 Brookfield Rd., Waltham, Mass. 02154

Gentlemen:

Would you please furnish me with a quotation to furnish all labor, equipment, insurance and all other things necessary to remove waste oil from Alcoa's oil reclamation pond. The salvaged oil will become the property of the contractor at the point of removal from our location. Alcoa makes no representation or guarantee as to the quantity available nor the content of the waste oil.

The successful contractor will make an effort to keep the level of waste oil to an agreed upon level and the oil can be removed only during normal working hours.

Your quotation should cover a period from November 1, 1977 thru November 1, 1978. We would appreciate your reply by October 26, 1977.

Very truly yours,

ALUMINUM COMPANY OF AMERICA

W. W. Hamilton
Buyer - Tel. No. (315) 764-4376

WWH:njr

N.N.O.O. - Cc H. Burgert - 73A

71C

#30

1977 October 18

Gentlemen:

Would you please furnish me with a quotation to furnish all labor, equipment, insurance and all other things necessary to remove waste oil from Alcoa's oil reclamation pond. The salvaged oil will become the property of the contractor at the point of removal from our location. Alcoa makes no representation or guarantee as to the quantity available nor the content of the waste oil.

The successful contractor will make an effort to keep the level of waste oil to an agreed upon level and the oil can be removed only during normal working hours.

Your quotation should cover a period from November 1, 1977 thru November 1, 1978. We would appreciate your reply by October 26, 1977.

Very truly yours,

ALUMINUM COMPANY OF AMERICA

W. W. Hamilton
Buyer - Tel. No. (315) 764-4376

WWH:njr

1501 ALCOA BUILDING
 PITTSBURGH, PA. 15219

WORKS	DATE	INVOICE NO.
Massena	1978-05-15	0124-0182

SAME AS "INVOICED TO" UNLESS OTHERWISE INDICATED

 Parent Oil Co.
 P. O. Box 51
 Moira, N. Y. 12957

SHIPPED TO

#31

VENDOR NO.		YOUR INVOICE REFERENCE			YOUR ORDER NO.	
675050A00		NUMBER	DATE	AMOUNT		
OUR ORDER NO.		TERMS			DATE SHIPPED	
MA080354		Net 30				
F.O.B.		VIA			CAR NUMBER	B/L NUMBER
DESCRIPTION						AMOUNT
To absorb money orders for payment of reclaimed lubricants for the 6 month period beginning April 1, 1978.						475.00
WHEN REMITTING - SEND CHECK TO: 1501 ALCOA BUILDING PITTSBURGH, PA. 15219						

ALUMINUM COMPANY OF AMERICA

1501 - 2AC ALCOA BUILDING
PITTSBURGH, PA. 15219



WORKS

Massena

DATE

1979-03-14

INVOICE NO.

0124-0134

SAME AS "INVOICED TO" UNLESS OTHERWISE INDICATED

Parent Oil Co.
P. O. Box 51
Maira, N. Y. 12957

#32

994895/094496

VENDOR NO. 675050A00		YOUR INVOICE REFERENCE		
YOUR ORDER NO.		NUMBER	DATE	AMOUNT
OUR ORDER NO. MA080354		TERMS Net 30		DATE SHIPPED
F.O.B.	VIA	CAR NUMBER	B/L NUMBER	MSO NUMBER
DESCRIPTION				AMOUNT
To absorb money order for payment of reclaimed lubricants.				475.00
PLEASE REFERENCE INVOICE NUMBER WHEN REMITTING				

ALCOA

27

PURCHASE ORDER

PURCHASE ORDER NUMBER

080713

P.O. DATE

BUYER

AUTH. NUMBER

DATE MATERIAL
REQUIREDDATE SHIP
PROMISE

13-14

15-21

22

23-25

26-32

33-39

VENDOR NUMBER 58-66

PARENT OIL CO.
P. O. BOX 51
MOIRA, N. Y.
12957

675050A00

SELLER PLEASE NOTE

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ORDER MUST BE IN CONFORMANCE
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BACK HEREOF.

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INVOICES AND CORRESPONDENCE
MUST BE IDENTIFIED WITH THE PUR-
CHASE ORDER AND VENDOR NUMBERS.

SHIP TO

ALUMINUM COMPANY OF AMERICA
MASSENA
NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE
AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

SHIP VIA 87-08

F.O.B.

TERMS

REQUISITION WRITER

J. MURPHY-73
IN PLANT DELIVERY LOCATION

VENDOR'S TRUCK

NET 30 DAYS

DESCRIPTION AND SPECIFICATIONS

PRICE & UNIT

A
C
S

= ACCOUNT CODE 18-27
= COMMODITY CODE 28-39
= STORES NUMBER

ITEM
NO.

QUANTITY

UNIT
MEAS.

28-64

65-74

75-77

15-17

18-24

25-27

1

1

LOT

FURNISH ALL LABOR, EQUIPMENT, ^{supplies} ~~supplies~~,
INSURANCE AND ALL OTHER THINGS
NECESSARY TO COLLECT USED LUBRICANTS
FROM ALCOA'S RECLAMATION POND DURING
THE PERIOD FROM 01 ~~1978~~ THRU 31 ~~1978~~

THE SALVAGED OIL WILL BECOME THE
PROPERTY OF THE CONTRACTOR AT THE
POINT OF REMOVAL FROM OUR WORKS.

ALCOA MAKES NO REPRESENTATION OR
GUARANTEE AS TO THE QUANTITY NOR
THE CONTENT OF THE USED LUBRICANTS.

IN RETURN FOR SUCH LUBRICANTS, CONTRACTOR
AGREES TO PAY ALCOA ~~\$250.00/HR~~ - 750.00/HR for the six
~~\$175.00 ON DEMAND AND \$175.00 ON~~
~~01 NOV 78~~

month period. Payment shall be made by 10/1/79

Seller shall sign the attached Hold Harmless
Agreement and return ^{one} (1) copy to
E. R. Werner, Aluminum Company of America,
Massena, N.Y. 13662

NJR

Alcoa, P.O. Box 150
Massena, N.Y. 13662

ALUMINUM COMPANY OF AMERICA

E. R. WERNER, DIST. PUR. AGENT

W. W. HAMILTON

BUYER - TEL. NO. (315) 764-4376

COPY 2

DO NOT CHARGE NEW YORK OR
ST. LAWRENCE COUNTY SALES OR USE
TAX AS WE ARE AUTHORIZED TO PAY
TAX DIRECTLY UNDER DIRECT PAYMENT
PERMIT NO. 000016. OUR EMPLOYER'S
IDENTIFICATION NO. IS 25-0317820

072

ALCOA

PURCHASE

PURCHASE ORDER NUMBER		P.O. DATE		BUYER		AUTH. NUMBER	
MA 5-08013742 PA 13-14		25 APR 78 22		H22-25		VENDOR NUMBER 58-66	

SELLER PLEASE

PARENT OIL CO.
P. O. BOX 51
MOIRA, N. Y.
12957

675050A00

INVOICES RENDERED AGAINST ORDER MUST BE IN CONFORMANCE WITH INSTRUCTIONS PRINTED BACK HEREOF.

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SHIP TO

ALUMINUM COMPANY OF AMERICA
MASSENA
NEW YORK
13662

INVOICE IN DUPLICATE TO ABOVE ADDRESS. SHOW VENDOR CODE AND ORDER NO. MAIL ATTENTION ACCOUNTS PAYABLE.

REQUISITION WRITER

J. J. MURPHY

VENDOR'S TRUCK			NET 30 DAYS							
NO.	QUANTITY	MEAS.	DESCRIPTION AND SPECIFICATIONS		PRICE & UNIT		A	C	S	
15-17	18-24	25-27	28-64		65-74	75-77				
SELLER SHALL SIGN AND RETURN THE "ACCEPTANCE COPY" OF THIS ORDER IMMEDIATELY TO THE COMPANY'S MR. E. R. WERNER, DISTRICT PURCHASING AGENT, MASSENA, NEW YORK 13662.										
THIS PURCHASE ORDER IS ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS STATED HEREIN THIS _____ DAY OF _____, 19____										
SELLER										
NJR										

DO NOT CHARGE NEW YORK OR ST. LAWRENCE COUNTY SALES OR USE TAX AS WE ARE AUTHORIZED TO PAY TAX DIRECTLY UNDER DIRECT PAYMENT PERMIT NO. 000016. OUR EMPLOYER'S IDENTIFICATION NO. IS 25-0317820

ALUMINUM COMPANY OF AMERICA

E. R. WERNER, DIST. PUR. AGENT

W. W. HAMILTON
BUYER - TEL.NO.(315)764-4376
COPY 2



'ACCEPTANCE COPY'

PURCHASE ORDER

PURCHASE ORDER NUMBER	P.O. DATE	BUYER	AUTH. NUMBER	DATE MATERIAL REQUIRED	DATE SHIPMENT PROMISED
MA080713MA	13JUN79	MA3			31DEC79

VENDOR NUMBER

675050A00

SELLER PLEASE NOTE

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PARENT OIL COMPANY
P O BOX 51
MGIRA

NY 12957

SHIP TO

ALUMINUM COMPANY OF AMERICA
MA080713MA 675050A00
MASSENA OPERATIONS
MAIL P. O. BOX 150

MASSENA, NEW YORK 13662

FREIGHT PARK AVENUE EAST
MASSENA, NEW YORK 13662

SHIP VIA

F.O.B.

TERMS

COMPANY PICKUP

DESTINATION

NET 30 DAYS

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S	- ACCOUNT CODE - COMMODITY CODE - STORES NUMBER
1	1	LOT	<p>FURNISH ALL LABOR, EQUIPMENT, SUPERVISION, HAULING, TAXES, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT USED LUBRICANTS FROM ALCOA'S RECLAMATION POND DURING THE PERIOD FROM 01JUL79 THRU 31DEC79.</p> <p>• THE SALVAGED OIL WILL BECOME THE PROPERTY OF THE CONTRACTOR AT THE POINT OF REMOVAL FROM OUR WORKS.</p> <p>• ALCOA MAKES NO REPRESENTATION OR GUARANTEE AS TO THE QUANTITY NOR THE CONTENT OF THE USED LUBRICANTS.</p> <p>• IN RETURN FOR SUCH LUBRICANTS, THE CONTRACTOR AGREES TO PAY ALCOA \$750.00/LOT FOR THE SIX MONTH PERIOD. PAYMENT SHALL BE MADE BY 10/1/79.</p> <p>• SELLER SHALL SIGN THE ATTACHED HOLD HARMLESS AGREEMENT AND RETURN ONE (1) COPY TO MR. E. R. WERNER, ALUMINUM COMPANY OF AMERICA, P.O. BOX 150</p> <p>CONTINUED ON PAGE 2</p>	LATER	A C	0094196 000
WP						

NOTE: In accepting this order it is understood the Seller agrees to the terms and conditions shown above and printed on the back hereof. The Company hereby objects to any conflicting or additional terms or conditions.

ALCOA PURCHASING CONTACT

J. J. LA CLAIR

TELEPHONE NUMBER 315-764-4374

ALUMINUM COMPANY OF AMERICA

LEN B. NEUBERT, Vice President, Purchasing, PITTSBURGH, PA. 15219

BY 

E. R. WERNER
DISTRICT PURCHASING AGENT
MASSENA, NEW YORK 13662



PURCHASE ORDER

PURCHASE ORDER NUMBER	P.O. DATE	BUYER	AUTH. NUMBER	DATE MATERIAL REQUIRED	DATE SHIPMENT PROMISED
MA080713HA	13JUN79	MA3			31DEC79

PAGE 2
PARENT OIL COMPANY

VENDOR NUMBER

675050A00


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SHIP TO

SHIP VIA F.O.B. TERMS

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	ACS	- ACCOUNT CODE - COMMODITY CODE - STORES NUMBER
			MASSENA, NY 13662.			
						
WP			CONTINUED ON PAGE 3			

NOTE: In accepting this order it is understood the Seller agrees to the terms and conditions shown above and printed on the back hereof. The Company hereby objects to any conflicting or additional terms or conditions.

ALCOA PURCHASING CONTACT
J. J. LA CLAIR
TELEPHONE NUMBER 315-764-4374

ALUMINUM COMPANY OF AMERICA

LEN B. NEUBERT, Vice President, Purchasing, PITTSBURGH, PA. 15219

BY

E. R. WERNER
DISTRICT PURCHASING AGENT
MASSENA, NEW YORK 13662



PURCHASE ORDER

PURCHASE ORDER NUMBER	P.O. DATE	BUYER	AUTH. NUMBER	DATE MATERIAL REQUIRED	DATE SHIPMENT PROMISED
MA080713MA	13JUN79	MA3			31DEC79

PAGE 3
PARENT OIL COMPANY

VENDOR NUMBER

675050A00

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SHIP TO

SHIP VIA	F.O.B.	TERMS
----------	--------	-------

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S	= ACCOUNT CODE = COMMODITY CODE = STORES NUMBER
NOTES						
A			SELLER SHALL SIGN ATTACHED ACCEPTANCE COPY AND RETURN IT IMMEDIATELY TO THE COMPANY'S MR. E. R. WERNER, DISTRICT PURCHASING AGENT, ALUMINUM COMPANY OF AMERICA, P.O. BOX 150, MASSENA, NEW YORK 13662.			
			ACCEPTED ON THE TERMS AND CONDITIONS STATED HEREON			
			SELLER _____			
			AUTHORIZED SIGNATURE <i>Walter W. Werner</i>			
			DATE <i>6/19/79</i> TITLE <i>Owner</i>			
WP						

NOTE: In accepting this order it is understood the Seller agrees to the terms and conditions shown above and printed on the back hereof. The Company hereby objects to any conflicting or additional terms or conditions.

ALCOA PURCHASING CONTACT
J. J. LA CLAIR
TELEPHONE NUMBER 315-764-4374

ALUMINUM COMPANY OF AMERICA

LEN B. NEUBERT, Vice President, Purchasing, PITTSBURGH, PA. 15219

BY

George J. La Clair
E. R. WERNER
DISTRICT PURCHASING AGENT
MASSENA, NEW YORK 13662

HOLD HARMLESS AGREEMENT

WW Sh
EW
The undersigned ~~employee~~/buyer of the Aluminum Company of America acknowledges that the Aluminum Company of America or its subsidiaries (hereinafter called ALCOA) is selling the listed material or equipment AS IS - WHERE IS.

ALCOA MAKES NO WARRANTIES OF ANY KIND, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

EW WW Sh
The undersigned ~~employee~~/buyer is prepared to purchase this material or equipment on the basis that the utilization of this material or equipment will be solely at the risk of the ~~employee~~/buyer, and the ~~employee~~/buyer hereby agrees to indemnify ALCOA against all loss, liability and damage resulting from claims brought by injured parties as the result of use of this material.

~~The undersigned employee/buyer further certifies that the material purchased is for his own personal use and is not for resale.~~

ER Warner 790619
WW Parent 790619

REFERENCE: MA 080713 MA
PARENT OIL COMPANY

ITEM PURCHASED: USED LUBRICANTS

AMOUNT: \$750.00

SIGNATURE: *William D. Parent*

DATE: 14JUN79



PURCHASE ORDER 880713

PURCHASE ORDER NUMBER MA080713MA 5-6 7-12 13-14	P.O. DATE 13 JUN 79 15-21 22	BUYER MA3 23-25	AUTH. NUMBER	DATE MATERIAL REQUIRED 31 DEC 79 26-32	DATE SHIPMENT PROMISED 31 DEC 79 33-39
VENDOR NUMBER 58-66					

PARENT OIL COMPANY
P O BOX 51
MCIRA NY 12957

675050A00

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*Expired
not to be
renewed*

SHIP TO

ALUMINUM COMPANY OF AMERICA
MA080713MA 675050A00
MASSENA OPERATIONS
MAIL P. O. BOX 150
MASSENA, NEW YORK 13662
FREIGHT PARK AVENUE EAST
MASSENA, NEW YORK 13662

SHIP VIA 67-68

F.O.B.

TERMS

COMPANY PICKUP

DESTINATION

NET 30 DAYS

REQUISITION WRITER

J MURPHY 73

IN PLANT DELIVERY LOCATION

ON SITE

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE & UNIT	A C S	18-27	28-38
15-17	18-24	25-27	28-64	65-74 75-77			
1	1	LOT	FURNISH ALL LABOR, EQUIPMENT, SUPERVISION, HAULING, TAXES, INSURANCE AND ALL OTHER THINGS NECESSARY TO COLLECT USED LUBRICANTS FROM ALCOA'S RECLAMATION POND DURING THE PERIOD FROM 01JUL79 THRU 31DEC79. • THE SALVAGED OIL WILL BECOME THE PROPERTY OF THE CONTRACTOR AT THE POINT OF REMOVAL FROM OUR WORKS. • ALCOA MAKES NO REPRESENTATION OR GUARANTEE AS TO THE QUANTITY NOR THE CONTENT OF THE USED LUBRICANTS. • IN RETURN FOR SUCH LUBRICANTS, THE CONTRACTOR AGREES TO PAY ALCOA \$750.00/LOT FOR THE SIX MONTH PERIOD. PAYMENT SHALL BE MADE BY 10/1/79. • SELLER SHALL SIGN THE ATTACHED HOLD HARMLESS AGREEMENT AND RETURN ONE (1) COPY TO MR. E. R. WERNER, ALUMINUM COMPANY OF AMERICA, P.O. BOX 150 CONTINUED ON PAGE 2	LATER	A C S	0094196 000	

*1/3/80
put TTL
and
Phil Woodward
we will
not sell
used oil
for the time
being
Do not
renew
contract*

ALCOA PURCHASING CONTACT
J. J. LA CLAIR
TELEPHONE NUMBER 315-764-4374

ALUMINUM COMPANY OF AMERICA

E. R. Werner

E. R. WERNER
DISTRICT PURCHASING AGENT
MASSENA, NEW YORK 13662

COPY 2

ALUMINUM COMPANY OF AMERICA

1501 - 2AC ALCOA BUILDING
PITTSBURGH, PA. 15219



WORKS	DATE	INVOICE NO.
Massena	1980-04-22	0124-0210

SAME AS "INVOICED TO" UNLESS OTHERWISE INDICATED

Parent Oil Company
P. O. Box 51
Moira, New York 12957

SHIPPED TO

999895/094196

VENDOR NO. 675050A00		YOUR INVOICE REFERENCE			
YOUR ORDER NO.		NUMBER	DATE	AMOUNT	
OUR ORDER NO. NA080713		TERMS		DATE SHIPPED	
F.O.B.		VIA	CAR NUMBER	B/L NUMBER	MSO NUMBER
DESCRIPTION					AMOUNT
To absorb your Check No. 22401 in payment for salvaged oil.					750.00

PLEASE REFERENCE INVOICE NUMBER WHEN REMITTING

FROM

TO

F. M. SITTIG
ENVIRONMENTAL ENGINEERING DIV.
ALCOA BUILDING - 2

MR. J. B. WALKER
MASSENA OPERATIONS

June 12, 1972

RE: INDUSTRIAL LIQUID AND SOLID WASTE SURVEY

Attached is a copy of our completed report for the captioned survey. I thank you and Mr. R. K. Brown for your cooperation and assistance in gathering this information for us.

Section XIII of the report lists five recommendations which we believe should be given serious consideration. We would appreciate hearing from you should you have any questions or comments concerning these items or any other aspect of the report.

A final report will be published at the completion of this company-wide survey program comparing the operating expenses for both the liquid and solid waste disposal operations of all the plants surveyed.

F. M. Sittig

F. M. SITTIG

FMS:bsd

Attachment

CC: V. W. Rieke/E. F. Maziarz, Jr. - AB 2
R. K. Brown/R. W. Knapp - Massena

074 A

MASSENA OPERATIONS
INDUSTRIAL LIQUID AND SOLID WASTE SURVEY

This survey was conducted during April, 1972 for the purpose of bringing the Environmental Engineering Division up to date on the liquid and solid waste disposal methods employed at Massena Operations as well as determining the costs associated with these operations. The report is in thirteen sections with our present recommendations for future improvements in the final section.

I. Manufacturing Operations and Contaminants

- A. The principal production operations include primary production of aluminum (SIC3334), fabrication of aluminum wire, rod and bar (SIC3353), bare and insulated aluminum conductor (SIC3357) and production of aluminum conductor accessories (SIC3644). The plant employs about 2800 people.
- B. The main contaminants contributed by these operations are suspended solids, fluorides, oil and phenols.

II. Plant Personnel

Persons contributing to this report included Messrs. R. K. Brown (Smelting Chief Mechanical Engineer) and C. W. McConnell (Accountant).

III. Regulatory Agency Contacts

A good working relationship is maintained with Mr. Hans Paller, Massena Office, New York State Department of Environmental Conservation.

Mr. Gordon A. Yesser (Chief, Construction - Operations Division) has been the plant's contact in the Corps of Engineers Buffalo, N.Y. District Office. No personal contacts have been made with Corps' personnel.

IV. Permits and Standards

Massena was issued a New York State Department of Environmental Conservation Permit to Construct a Waste Disposal System on July 14, 1971. Construction of the waste treatment plant eliminated Discharge 002 (See Attachment A) in May, 1972 by diverting the flow to outfall 001./ New York State does not require a permit for discharging untreated process water at Discharge 003.

A U.S. Army Corps of Engineers Permit Application #070-0X2-2-000293 has been filed with the Corps' Buffalo, N.Y. District Office.

The latest copy of the Rules and Classifications and Standards of Quality and Purity for waters of New York State as well as a copy of the criteria and regulations governing thermal discharges are available in the Environmental Engineering Division files. 74B

A copy of the Rules and Regulations regarding solid waste disposal has been ordered from the New York State Department of Environmental Conservation. "

V. Treatment Facilities

There were no industrial wastewater treatment facilities in operation at Massena in 1971.

All of the wastewater was collected in the plant storm sewer system and discharged to the Grasse River through two outfalls (001 and 002) and to the old power canal through one outfall (003). See Attachment A - Sewer Outfall Locations, Massena, N.Y.

Outfall 001 handles wastewater and storm water from the fabricating plant area and the effluent from the biological oxidation pond.

The biological oxidation pond treats all of the sanitary wastewater from Massena Operations. The sanitary waste flow rate averages 1.8 MGD. The effluent from the oxidation pond is chlorinated (31 lb./day) to maintain a chlorine residual of 0.65 mg/l.

The potroom and carbon plant scrubber water had been discharged, untreated, through outfall 002. This outfall was eliminated in May, 1972, with the startup of the new wastewater treatment facility. This flow is now intercepted, neutralized, and pumped to settling ponds which will overflow into outfall 001. A detailed description of the treatment process can be found in the next section.

Outfall 003 accepts only storm water runoff from the smelting plant area.

VI. Process Description

The wastewater treatment facilities were built in 1971-72 to meet New York State water standards. These facilities provide treatment of wastewater from the three existing N-40 Potlines and the carbon baking furnace scrubbers. The treatment scheme is designed to remove fluorides, suspended matter and phenols.

The waste and storm water flow of 8000 to 13,000 GPM is intercepted in an existing 60" concrete sewer and directed to two below ground concrete neutralization tanks. These tanks are 16' x 16' x 9' (17,200 gal.) and are operated in series with a normal retention time of 2.15 minutes each at 8000 GPM flow rate. The untreated waste contains approximately 60 ppm fluoride, 100 ppm suspended solids, 2 ppm phenol and has a pH of 3.5. Pebble quicklime, stored in an 80-ton capacity steel hopper (3200 ft.³) is gravity fed to a 2000#/hr. capacity Wallace and Tiernan volumetric feeder and lime slaker. The resulting calcium hydroxide is fed to the first neutralization tank under automatic pH control. The weekly lime feed rate has been about 20 tons.

There is a 1000#/hr. Wallace and Tiernan feeder and slaker installed to feed lime when the prime feeder requires maintenance. The quicklime (\$28.90/ton) is delivered by Dallock Corporation once a week in bulk trucks (40,000 lbs.) equipped with blowers. The lime treated wastewater is completely mixed in each tank by a 10 HP Lightnin Mixer.

Then the wastes flows to a 9' x 16' x 9' (10,000 gal.) wet pit with a normal retention time of 1.25 minutes. There are three transfer pumps installed in the wet, pit which lift the water to a primary settling lagoon located about 2800' from the treatment building and about 65' higher than the water level at the wet pit. The pumps are variable capacity vertical turbine Peerless pumps (2500 GPM to 4350 GPM). The pumping rate is regulated by progressive addition of air into the suction bell. The pumps are started and stopped automatically by a level control in the wet pit. The pipeline to the primary settling lagoon is 24" diameter Johns-Manville Flextran. The flow is maintained at a velocity of 6.4 ft./sec. at 8,000 GPM to prevent deposition of solids in the force main. The primary settling lagoon is 100' x 800' x 8' (4,600,000 gal.) and has a retention time of 9.6 hours.

The effluent from the primary lagoon is gravity fed through an open aeration ditch to a 60-acre settling lagoon. This lagoon holds 78,000,000 gallons and has a retention time of 6.8 days. The pH of the water is maintained in the range of 7.5 to 8.5 to enhance the biological oxidation of phenol. The outfall structure for the 60-acre lagoon has a building over it and is equipped with a weir, a flow indicating and recording instrument, and an automatic composite sampler.

The effluent from the lagoon should contain not more than 18 ppm of fluoride and 20 ppb of phenol. This water is diluted with approximately 10,000 GPM of uncontaminated wastewater from the ingot and fabricating plants. Thus the fluorides will be below the specified level of 2.4 ppm and the phenol below 5 ppb in the Grasse River.

An operator checks on the plant operation once each shift.

VII. Receiving Water

The waste process water is discharged to the Grasse River which has an average flow of 250 CFS and a minimum 10-year low flow of 134 CFS.

The Grasse River, designated Class C by the State of New York, empties into the St. Lawrence River about 5 miles from Massena.

VIII. Effluent Analyses

No routine wastewater samples are collected at the present time. However, Mr. Hans Paller, Massena Office, New York State Department of Environmental Conservation has proposed sampling and analyses requirements for the wastewater treatment system starting this

summer. See Attachment B - Smelting Plant Wastewater Treatment Facilities.

IX. Drawings

Prints showing the storm sewer system, sources of wastewater, and the new waste treatment facilities are in Environmental Engineering Division files.

X. Solid Waste Disposal

The solid and liquid wastes disposed of by the plant include paper, wood, paperboard, garbage, scrap wood reels, waste oil, oily sludge, and caustic sludge. Estimated 1971 volumes of the various wastes are tabulated below.

A. Office and Lunch Room Refuse	6,000 CY	10
B. Dempster-Dumpster Boxes - paper, wood, misc. trash	43,000 CY	75
C. Shop & Construction - Scrap lumber.	2,000 CY	3
D. Wood reels	4,000 CY	7
E. Sludge	1,000 CY	2
F. Tires, wood floor block, oil filters, polyethylene scrap and other intermittent trash.	2,000 CY	3
	58,000 CY	100

There are 125 Alcoa owned dumpster boxes located throughout the plant area. Most of these boxes are emptied daily by two dempster dumpster trucks.

Office and lunch room refuse is collected aily in a barbage truck manned by a driver and helper. A 700-gallon tank truck is in full-time use for oil waste disposal. *5 exempt fr cont of 2 dump trucks/2ma*

A 6000-gallon oil tanker with a driver and helper is used part time for pumping out mill pits and hauling the oil to the oil lagoon. *Yes - 2ma*

No {The waste oil is treated with calcium chloride in the tank trucks while on the way to the oil lagoon. This procedure aids emulsion breaking in the lagoon. The water in the main oil lagoon is circulated through spray nozzles to enhance evaporation. Oil is skimmed from the main oil lagoon and pumped to a small holding pond where it is picked up by Pierce Company at no cost to Alcoa.

This is the most economical way of disposing of the waste oil at the present time. However, if the oil scavenger would start to charge for picking up the waste oil then disposal by burning in the boilers would be recommended.

All of the trash generated at Massena Operations is disposed of on Company property at four landfill areas. See Attachment C - Landfill areas.

The main dump area is designated as Landfill Area #1. This area is about 20 acres in size and receives garbage, scrap wood and miscellaneous trash. The estimated remaining life for this area is about 10 years.

Cinders and clean fill are stockpiled for covering the trash by a company-owned tractor. Wood reels are stockpiled in a separate area of this landfill and are picked up by a scavenger or burned with approval of the local Health Department.

Landfill Area #2 is used only for bag collector refuse and other solid waste.

Landfill Area #3 is limited to dust from the skim room.

Landfill Area #4 is used only for disposal of oily and caustic— sludge. This area has been inspected by Mr. Hans Paller of the local Health Department and is considered satisfactory for this purpose.

In 1971 scrap and reclamation sales amounted to \$51,000. See Attachment C - Scrap Metals and Reclamation.

XI. Capital and Operating Costs - Solid Wastes

A. Total Capital Costs to Date:

1. Garbage Truck	\$14,521	
2. Oil Truck (6000 gal.)	4,871	
3. Tank Truck (700 Gal.)	3,500	
4. Dempster Dumpster (2)	18,534	
5. Dempster Dumpster Boxes (125) -	17,453	
6. Catapiller Tractor	30,588	
TOTAL CAPITAL COSTS		\$89,467

B. Operating Expenses

1. Decreciation

a. Garbage Truck	\$ 2,904	
b. Oil Truck	974	
c. Tank Truck	420	
d. Dempster Dumpsters (2)	3,707	
e. Dempster Dumpster Boxes (fully depreciated)	-0-	
f. Catapiller Tractor	3,059	
TOTAL DEPRECIATION		\$11,064

2. Labor Charges

a. Garbage Truck Driver & Helper	\$24,669
b. Oil Truck Driver & Helper	24,669
c. Tank Truck Driver	1,092
d. Dempster Dumpster Drivers (2)	24,669
e. Tractor Operator	4,369
f. Hauling Fill to Dump	1,283

g. Hauling Misc. Junk to Dump	\$ 1,283	
h. Supervisor	<u>2,290</u>	
TOTAL LABOR CHARGES		\$ 84,324

3. Repair & Maintenance

a. Garbage Truck	\$ 1,958	
b. Oil Truck	1,176	
c. Tank Truck	93	
d. Dempster Dumpsters (2)	8,071	
e. Dempster Dumpster Boxes	337	
f. Catapiller Tractor	874	
g. Hauling Fill to Dump	257	
h. Hauling Misc. Junk	<u>257</u>	
TOTAL REPAIR & MAINTENANCE		\$ 13,023

TOTAL OPERATING EXPENSES - 1971	\$108,411
---------------------------------	-----------

TOTAL CUBIC YARDS OF UNCOMPACTED TRASH - 1971 = 58,000

TOTAL COST PER CUBIC YARD OF TRASH - 1971 = \$1.87/CY or \$187/100

Total operating expenses less credit for
scrap and reclamation sales = \$57,411.

Cost cubic yard of trash after taking
credit for scrap sales = \$1.00/CY or \$100/100 CY.

XII. Problem Areas

- A. There are combined storm, process water and sanitary sewers in Building 1 area. As a result of this situation, some oily wastewater gets pumped to the sanitary waste lagoon.

A proposal has been made to separate these sewers.

- B. At the present time, the cooling water effluent from the ingot and fabricating plants discharges directly to the Grasse River. However, in the future these wastewaters will be pumped to the settling lagoons where any floating oil can be removed.

- C. It has been brought to our attention at Vancouver that leachate from the pot lining storage area contains cyanide in addition to fluoride. Since the leachate at Massena is directed to the new wastewater treatment facilities, the presence of cyanide may harm the phenol reduction process in the 60-acre lagoon by killing bacteria in the water.

XIII. Recommendations

- A. Make an indepth study of oil storage areas and any other potential sources of accidental spills with a view toward developing a Pollution Incident Prevention report similar to

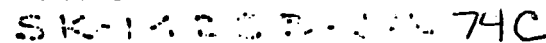
the type required by the State of Pennsylvania. See Attachment D.

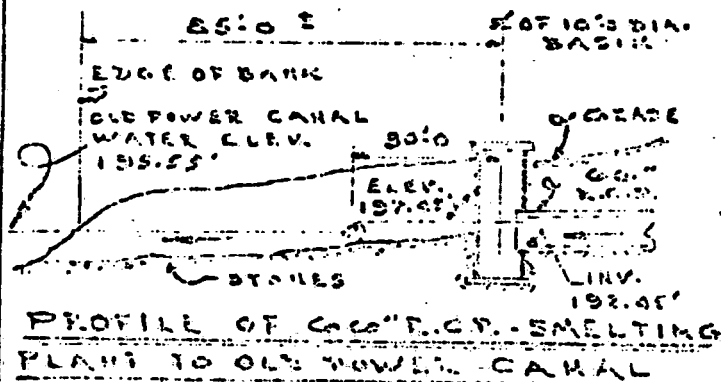
- B. Investigate feasibility of compacting trash to reduce volume and number of trips to the dump area. It may be feasible to replace some dumpster boxes with a compactor as the boxes wear out.
- C. Provide for more covering material at the main dump area.
- D. Collect leachate samples from the pot lining storage area and determine cyanide concentration.
- E. Prepare an Operating and Preventive Maintenance Manual for the waste treatment plant. Pittsburgh Environmental Engineering would prepare a section on the theory of the treatment process for fluoride removal and phenol oxidation.

F. M. SITTIG

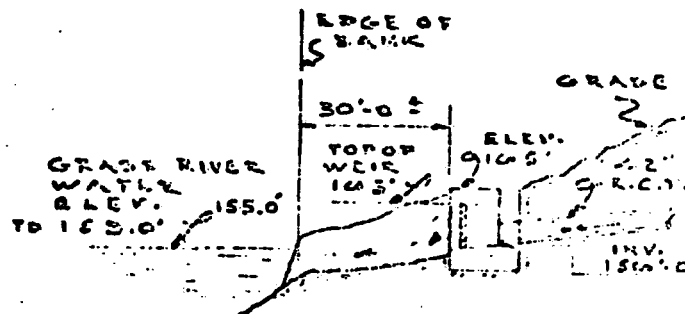
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JUNE 12, 1972

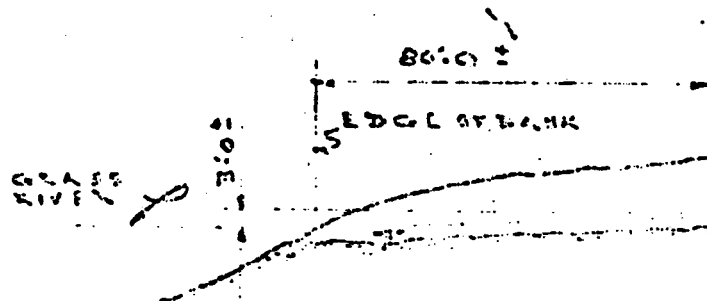




SCALE: 1" = 40.0'

DISCHARGE 003

SCALE: 1" = 40.0'

DISCHARGE 001PROFILE OF OPEN DITCH AT
MASSENA CENTER

SCALE: 1" = 40.0'

DISCHARGE 002

ELEV. U.S.L.S.

SCALE - AS NOTED

NOT TO SCALE

TITLE
SEWER OUTFALL LOCATIONS
PROFILES
ALUMINUM CO. OF AMERICA
MASSENA, N.Y. 13662

SK-1422-1-11

30

ALCOA MASSENA OPERATIONS
DESCRIPTION OF
SOLID WASTE DISPOSAL FACILITY

P. F. WOODWARD
ENVIRONMENTAL CONTROL SUPERINTENDENT

6 075

REVISED 1980 APRIL 15

TABLE OF CONTENTS

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II.	OPERATION OF DISPOSAL FACILITIES	2
	A. Description of Closure of Area No. 3: Heavy Oil and Sludge	3
	1. Ground Water Monitoring Existing Oil Waste Lagoon Dennison Road Report No. CD33-1-8-79	
	B. Description of Opening Area No. 3A: Heavy Oil and Sludge	4
	1. Geotechnical Investigation and Ground Water Monitoring Installation Proposed Oil Waste Landfill Project Report No. CD33-2-10-79	
	C. Operating Plan for Area No. 3A: Heavy Oil and Sludge	4
III.	REQUEST FOR VARIANCES	6
IV.	APPENDIX	9
	Table I: Description and Estimated Volume of Waste Disposed of Annually in Area No. 1 Landfill	
	Meteorological Data: Year 1979	
	Maps and Drawings:	
	B-086592-JM - Alcoa Massena Property Superimposed on New York State Quadrangle Maps	
	B-105209-JM - Topographic Map Showing Alcoa Massena Waste Disposal Sites (Revised 80/04/08)	
	A-107870-JM - Proposed Oil Waste Landfill Site, Site Topographic Map	
	Section A-A (Dwg. No. A-107870-JM) Soil Profile - Proposed Oil Waste Landfill Site	

ALCOA MASSENA OPERATIONS: DESCRIPTION OF SOLID WASTE DISPOSAL FACILITYI. METHODS OF DISPOSAL

The Massena Operations of the Aluminum Company of America located in the Town of Massena, County of St. Lawrence, (see attached print-Drawing B-086592-JM), produces primary aluminum (SlC 3334), aluminum ingot (SlC 3361), aluminum wire, rod and bar (SlC 3354 and 3355), wire and insulated aluminum conductor (SlC 3357), and aluminum conductor accessories (SlC 3361 and 3644). Most waste materials either associated with or produced by the manufacture of these products are recycled, sold or disposed of on Alcoa property contiguous to the plant site. The primary method of disposal is landfill.

The disposal areas are:

Area No. 1	Main Landfill
*Area No. 2	Soluble Oil Lagoon
**Area No. 3A	Heavy Oil and Sludge
Area No. 4	Potlining Pile (old)
Area No. 5	Potlining Pile (new)

These areas are located on the following drawings in the Appendix:

B-086592-JM - Alcoa Massena Property Superimposed on
New York State Quadrangle Maps

B-105209-JM - Topographic Map showing Alcoa Massena
Waste Disposal Sites

*Discontinued use of waste lub oil lagoon 1980 April 18.

**Closed Area No. 3 1979 November 13

Wastes requiring special handling are disposed of as follows:

Waste lubricating oils are accumulated in tanks. An as yet unknown amount will be used as fuel for an aluminum chip dryer and steam boilers. Any excess will be disposed of through either approved commercial reprocessors or waste disposal facilities. Water mixtures of soluble oil are held in an evaporation pond.

Used capacitors, PCB-contaminated solids, PCB-contaminated mineral oil and phosphate ester hydraulic fluid are stored in a facility that complies with EPA regulations. The solids will be disposed of in approved commercial disposal facility. Liquids containing 500 ppm or more of PCB's will be incinerated in an approved incinerator. Liquids containing less than 500 ppm PCB's will be burned on site in a high energy boiler equipped for proportioning of the fuels and for monitoring CO and excess oxygen.

As of 1980 April 28 sludge from solvent degreasers and materials containing asbestos are collected in 55-gallon drums. When a drum is filled, it is closed and sent to a storage area to be held for disposal in an off-site approved facility.

Sludge consisting of calcium fluoride, excess lime and carbon particles accumulate in a two-acre wastewater treatment lagoon at the approximate rate of two tons per day. The lagoon was dredged during 1977. The sludge was deposited in containment areas in the vicinity of the lagoon with provision for dewatering. The same procedure will be followed in the future.

II. OPERATION OF DISPOSAL FACILITIES

Area No. 1 -- Main Landfill

All solid waste that does not require special handling is disposed of in the Area No. 1 landfill dump. Reusable lumber and wooden reels are accumulated in one area and held for sale. Once a year, all clean lumber on hand is burned under permit from the DEC.

Miscellaneous waste (see Table 1 in Appendix for description) is accumulated in Dempster-Dumpster boxes that are located in all areas of the Operations. Office and lunch room waste, with few exceptions, are contained in plastic bags. The full boxes are transferred to the dump daily five days a week. Some miscellaneous waste is collected in open boxes designed for handling with fork trucks. The waste in these boxes is loaded into dump trucks for transfer to the dump. Scrap bricks from production facilities and earth and concrete from construction projects are hauled to the dump in dump trucks.

Once a week the active area of the dump is leveled with a bulldozer. Clean fill is added if necessary, but generally there is enough siliceous material in the waste to form a solid cover.

The land in this area is predominately grey clay. Percolation tests of the soil in this area made in 1960 resulted in zero percolation. There are no wells in the area because all water for plant usage comes from Lake St. Lawrence. The nearest known private wells are along the Dennison Road, approximately 6000 feet away in a northerly direction.

Area No. 2 - Oil Lagoons

A lagoon adjacent to Area No. 1 landfill is utilized for disposal of used soluble oil. The lagoon has a surface area of 125,000 square feet to promote evaporation and has a capacity in excess of 5,000,000 gallons.

Approximately 600,000 gallons of soluble oil and water used in rolling mills and saws are discarded annually. Spent caustic and acid solutions from aluminum etching facilities and wax emulsions are also disposed of in this lagoon. These solutions amount to approximately 500,000 gallons per year. These volumes plus rainfall exceed evaporation. To prevent overflows, the excess water is pumped into a nearby 60 acre polishing lagoon that is part of a wastewater treatment facility for which there is a NPDES discharge permit.

The concentration of oil and grease in the wastewater discharge is well below the permit limit for daily and monthly averages.

Area No. 3 - Landfill

A twenty-five foot deep ravine in the vicinity of Dennison Road was used for disposal of heavy oils, oily waste, and sludges. The 800 foot ravine was formed by material dredged from the Grasse River. It is screened from view from Dennison Road by a grove of trees and is approximately 2500 feet from the nearest residence, which is to the north on Dennison Road.

Most of the materials disposed of in the ravine come from the reservoirs associated with wire drawing machines and rolling mills. These reservoirs are pumped down and cleaned out, usually twice a year. The residue in the bottom is loaded into steel drums and dumped into the ravine. Oily waste from cleanup of the mills is also disposed of in the ravine. The drums of waste are covered with clean earth from the banks of the ravine once a month except during the winter months. Drums dumped during the winter are covered as soon as weather permits.

Approximately 10,000 gallons of oily sludges are discarded annually. The oil component is soluble oil, mineral oil and polybutenes. The solids are aluminum and steel fines, waxes, dirt and absorbent.

This area was closed effective 1979 November 13 and a new area opened within the plant fence. During August of 1979 Atlantic Testing Laboratories was retained to conduct subsurface soil investigations and to install monitoring wells at the old and new sites. The following section outlines these activities and operating and monitoring procedures to be followed:

A. Closure of Area No. 3: Heavy Oil and Sludge

Subsurface Investigation

During August of 1979 Atlantic Testing Laboratories conducted a subsurface investigation of the soil in the area and installed a ground water monitoring well at the northeast end of the site. See attached Report No. CD33-1-8-79.

Closure Procedure

The ravine was formed by two parallel deposits of dredge spoils from the Grasse River. Soil from these deposits, in general, a silty sand with varying proportions of clay and gravel was used to close the site. Grading operations proceeded south to north. Before filling of the ravine was completed, oil and water was pumped into a tank truck and transferred to Area No. 2, Waste Lub Oil Lagoon. After filling was completed, a 12-inch diameter stand pipe 20 feet long was installed in the north end of the ravine. The lower end of the pipe was perforated over a distance of about a foot.

This work was done during November of 1979. Final grading was not completed because of unfavorable weather.

During May of 1980 the site will be graded to provide good surface drainage away from the landfill. The site then will be mulched and seeded. The cover of clean soil over the waste material will range from ten to fifteen feet.

Monitoring

Sample monitor well annually and analyze for oils and greases, PCBs, Ca, Mg, Na, NH_4 , SO_4 , CO_3 , HCO_3 and NO_3 .

Sample monitor well quarterly and analyze for oils and greases and PCBs until trends are established. Program will be revised accordingly.

Check stand pipe quarterly for oil until assured that there is no migration of oil in the site.

B. Opening of Area 3A: Heavy Oil and Sludge

Geotechnical Investigation

Atlantic Testing Laboratory was retained to select a suitable site within the fenced area of Massena Operations. See attached Report No. CD33-2-10-79 and Drawing No. B-105209-JM for location of site and results of the investigation. Included in the report are subsurface data and details of the four ground water monitoring wells that were installed.

C. Operating Plan for Area No. 3A

Site Plan

See Drawing No. A-107870-JM for layout of site.

Pit I was completed November of 1979. It is 40' x 45' in plan and 13' deep. The bottom elevation at 263' is approximately 19' above the permanent ground water table.

The pits will be dug in numerical sequence. Not shown on the drawing is a dewatering trench located in the expansion area across from Pit I. The depth of this trench is limited to depth of soil of approximately 1×10^{-5} centimeters per second permeability.

Operating Plan

The waste will be covered twice a year, once during May and again in October or November depending upon the weather. Before covering, the pit will be dewatered. A bulldozer will be used for covering and compacting. Approximately a foot of earth cover will be placed over the open, crushed drums.

Two or more lifts will be made before final closure. Approximately three feet of glacial till (hard pan) from the pit being opened will be used for capping. The closed pit sites will be graded with top soil and seeded.

The projected time schedule for pit life follows:

<u>Pit No.</u>	<u>Eff. Vol., Cu. Yds.</u>	<u>Operable Period</u>	<u>Closure Date</u>
Pit I	900	79/11/15-81/07/31	Approximately one week
Pit II	900 - 1000	81/08/01-83/06/30	will be required for
Pit III	900 - 1000	83/07/01-85/06/30	opening a new pit and
Pit IV	900 - 1000	85/07/01-87/06/30	closing old pit between operable periods.

Description of Waste

The following substances are used as lubricants or as additives to lubricants:

Mineral Oil	Cetyl Alcohol
Polybutene	Petroleum Sulfonate (Emulsifier)
Lard Oil	Amines, (Corrosion Inhibitor)
Vegetable Oil	Metallic Salts (Corrosion Inhibitor)
Butyl Stearate	Of Fatty Acid
Graphite	Kerosene
Oleic Acid	Varnolene
	Grease

Monitoring

Sample monitor wells annually and analyze for oils and greases, PCBs, Ca, Mg, Na, NH_4 , SO_4 , CO_3/HCO_3 and NO_3 .

Sample monitor wells quarterly and analyze for oils and greases and PCBs until trends are established. Program will be revised accordingly.

Areas No. 4 and 5

Approximately 2900 tons of used potlinings are disposed of annually in outdoor piles. In 1976 October covering of the then existing pile (Area No. 4) with one foot of compacted earth was begun and a new pile was started at Area No. 5. Covering of the old pile was completed, including seeding and mulching, during July of 1977.

The new pile is located near the top of a wooded ridge in a two-acre site with extensive adjacent land for dispersion of leachate.

III. REQUEST FOR VARIANCES

Variances are being requested from certain requirements of Part 360 that would increase disposal costs significantly without benefit to the safety, health or environment of the people of the State of New York.

No variance is requested from Section 360.8 (a) because of the belief that the intent of all requirements is being met.

Variance from the following requirements is requested for the areas specified.

Section 360.8 (b)(1)(vii) (a) through (e) Areas No.1 and No.3

Area No. 1: Compliance with requirements (a), (b), (c) and (d) would require a full time operator. No adverse effects with respect to vectors, dust or odors have resulted from the existing practice of leveling the waste deposited at least once a week because of the physical characteristics of the wastes and because the wastes predominately are inert chemically and biologically. Most loose papers and the small amount of putrescible waste (see description of miscellaneous waste in Table I of the Appendix) present generally are contained in plastic bags. Evidence of the small quantity of putrescible waste is the limited number of sea gulls observed at the site.

A covering of six inches over each day's waste spread in two-foot layers would reduce the life of the site twenty-five percent. Intermediate covering would further reduce the life of the site. Furthermore, Alcoa has no plans

for development of this area because of its location between production centers and because of utilization of the adjacent land for disposal of sanitary wastes, oils and wastewater treatment.

Existing practice requires sufficient cover to provide for the safety of personnel and equipment handling solid waste.

Area No. 3: The disposal of heavy oils and sludges in 55 gallon drums requires special handling that does not conform entirely to these requirements, but the existing practice is consistent with the intent of the requirements. Utilizing this ravine as a landfill serves to level the area and thereby reclaim it for future use of a higher value.

Section 360.8 (b)(1)(xi) Area No. 1

Area No. 1: Permission is requested to continue to dispose of wastes containing asbestos in Area No. 1 as described in Section II of this report. This procedure contains the asbestos fibers and prevents them from becoming air borne and from entering ground or surface water. In this condition, asbestos is a non-hazardous industrial waste.

Section 360.8 (b)(3) Industrial Waste Disposal Facilities Areas No. 2, No. 4 and No. 5

Area No. 2: The oils and caustic and acid solutions disposed of in the oil lagoons are industrial wastes. The methods used for disposal of these substances protect the environment from harm and provide for reclamation of the reusable oils. Specific cover and compaction requirements for a sanitary landfill as stated in Section 360.8 (b)(1)(vii) (a) through (e) are not compatible with this operation; therefore, a variance is requested from these requirements.

Areas No. 4 and No. 5: Area No. 4 was closed in 1977 as a site for the storage of dug potlinings in the manner described in Section II of this report. The seeded earth cover will be maintained to assure good drainage and the development of a continuous sod. No intermediate covering is planned for the new site. As

indicated in Section II of this report, this site is isolated with a large wooded land area adjacent to it. Dug potlining when exposed to the elements is free of dust, vectors and obnoxious odors. Covering during the active life of this site would serve no useful purpose in this isolated area and would retard weathering and disintegration of the chunks of potlining.

IV APPENDIXTABLE IDESCRIPTION AND ESTIMATED VOLUME OF WASTE
DISPOSED OF ANNUALLY IN AREA NO. 1 LANDFILL

<u>Loads/Week</u>	<u>Description</u>	<u>Cubic Yards Per Year Compacted</u>
240 3-yard Boxes	* Miscellaneous Waste	18,700
14 8-yard Dump Trucks	* Miscellaneous Waste	3,900
11 8-yard Dump Trucks	Scrap bricks	3,400
70 Wooden Reels	Total number scrapped per week	-
1 3-yard Box	Foundry Sand	120
	Demolition and Construction Debris	No estimate
	Baghouse dust/handling of skim from molten aluminum	20
1 3-yard Box	Marinite and asbestos scrap	60
1 3-yard Box	Aluminum fines	60

* Miscellaneous waste consists of:

85% paper and wood products (packaging materials), wood pallets, wood chips and sawdust, and lunch area and office refuse that consists of paper towels and containers made from paper, steel and glass, and food scraps estimated at less than 1% of volume.

15% other materials such as: Steel (banding, drums, broken parts, turnings and cuttings), slag from cast iron melting furnaces, floor sweepings, carbon dust, polyethylene (sheet, bags, reels), fabric bags from dust collectors (orlon and cotton).

FROM P. F. WOODWARD

TO MR. R. LEE BYERS

MASSENA OPERATIONS

PITTSBURGH OFFICE

31

1981 June 12

RE: WASTE OIL AS A HAZARDOUS WASTE

The following substances are used at Massena as lubricants or as additives to lubricants:

Mineral Oil	Cetyl Alcohol
Polybutene	Petroleum Sulfonate (Emulsifier)
Lard Oil	Amines, (Corrosion Inhibitor)
Vegetable Oil	Metallic Salts of Fatty Acid (Corrosion Inhibitor)
Butyl Stearate	
Graphite	Kerosene
Oleic Acid	Varnolene
	Grease

Except for graphite, cetyl-alcohol and grease, these substances contribute to the waste lub oils that we are accumulating in a reservoir. Our intent is to burn these waste oils as fuel for the chip dryer and any surplus to be burned in the boiler equipped to burn PCB-contaminated mineral oil.

Approximately 12,000 gallons of non-PCB-contaminated waste oils are generated per month. The breakdown of the types of oil is as follows:

Motor oil from automotive shops	15%
Miscellaneous lub oil (mineral oil)	15%
Drawing oil (Polybutene)	30%
Varnolene	40%

The DEC will approve our request to burn these oils when we provide analysis of the oil mixture for metallic content and percent chlorine. They are concerned about heavy metals, but we do not think this will be a problem. They will accept chlorine at less than 0.5%, so this should not be a problem either.

The concern your letter of 1981 June 09 raises is that the proposed EPA regulations will make the burning of waste oils a problem. We will appreciate being kept posted on this development.

P. F. WOODWARD

PFW/lcg

Route copy: -R.-H. Feild/R. K. Brown - 60

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ALCOA

FROM: K. P. BELLOR

TO: MEMORANDUM

1982 June 25

32a

RE: SURGE CAPACITOR IDENTIFICATION FOR MASSENA POTLINE 6 RECTIFIERS

This memorandum outlines the current status of the Transformer Secondary Surge, Phase to Phase Surge, and Diode Snubber Capacitors installed on the Potline 6 rectifiers.

I SURGE CAPACITORS IN SERVICE

<u>Description</u>	<u>No. Per Rectifier</u>	<u>Total in Service</u>
A. <u>Transformer Secondary Surge Capacitor</u> Capacitor - .5 mfd, 2000 VDC, GE No. 28F5152FC	12	120
B. <u>Phase to Phase Surge Capacitors</u> Capacitor - 10 mfd, 1500 VDC or 700 VAC 60 Hz, GE No. 28F5146FC, West. Style 1589A93H39	12	120
C. <u>Diode Snubber Capacitor</u> Capacitor - .5 mfd, 2500 VDC, GE No. 28F5226	72	720

II CURRENT WESTINGHOUSE NON-PCB REPLACEMENTS

A. Transformer Secondary Surge Capacitor
Capacitor - .5 mfd, 2500 VDC,
West. Style 1815A71H54

B. Phase to Phase Surge Capacitors
Capacitor - 10 mfd, 1500 VDC,
West. Style 1815A70H39

C. Diode Snubber Capacitor
Capacitor - .5 mfd, 2000 VDC,
West. Style 1815A73H18

III SPARE CAPACITORS ON HAND AT MASSENA

	<u>Quantity</u>
A. <u>Transformer Secondary Surge Capacitor</u> Capacitor - .5 mfd, 2500 VDC, GE No. 23F1253	10
B. <u>Phase to Phase Surge Capacitor</u> Capacitor - 10 mfd, 1500 VDC, GE No. 28F5146FC, West. Style 1589A93H39	6

077

Memorandum

1982 June 25

Page Two

III SPARE CAPACITORS ON HAND AT MASSENA - Continued

Quantity
39

C. Diode Snubber Capacitor
Capacitor - .5 mfd, 2500 VDC,
GE No. 28F5054

The present spare capacitors listed in Part III are physically and electrically acceptable as Transformer Secondary Surge, Phase to Phase surge, and Diode Snubber Capacitors on the Potline 6 rectifiers. As future demand requires, Westinghouse Non-PCB replacements as listed in Part II will be purchased.

If there are any questions, please advise.


K. P. BELLOR

KPB:cdo

xc: J. M. Shaw

~~XXXXXXXXXXXXXXXXXXXX~~
J. M. Sweeney - 319